
**1992-1993
CULTURAL RESOURCES INVENTORY
OF 17,068 ACRES
WITHIN 11 SELECTED AREAS
OF THE FORT SILL
MILITARY RESERVATION,
FORT SILL, OKLAHOMA**

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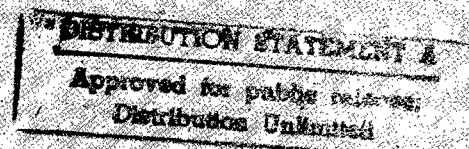
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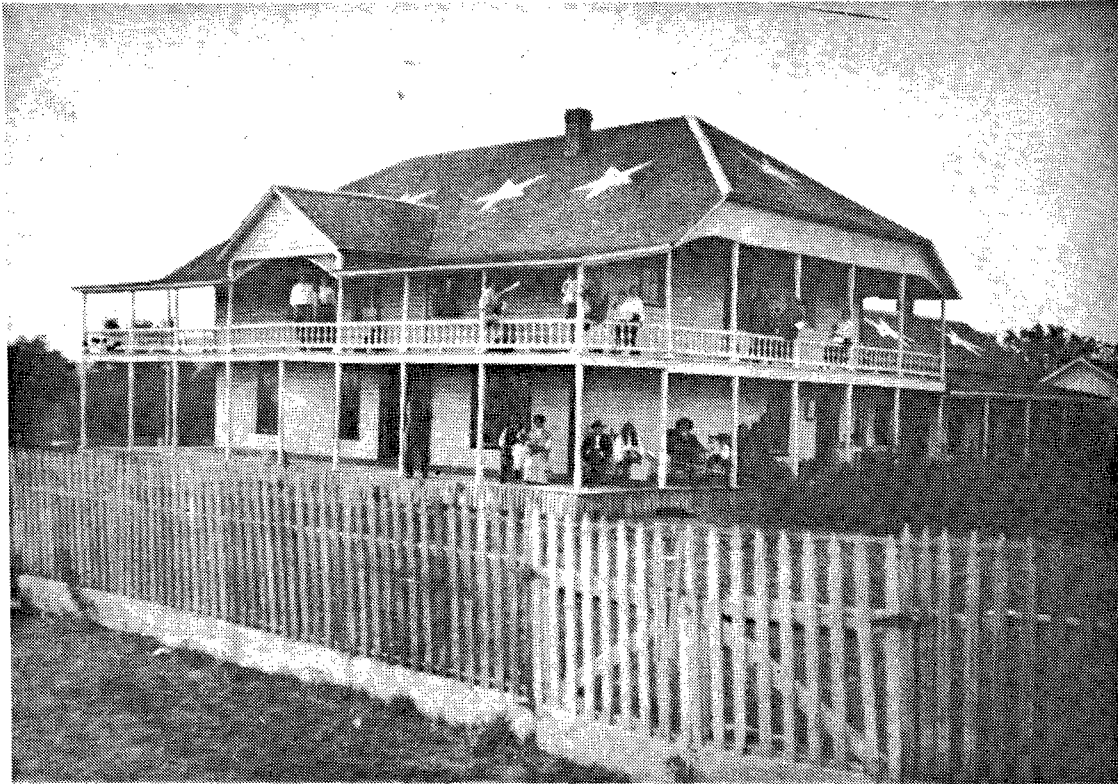
**FORT SILL MILITARY RESERVATION TECHNICAL SERIES
REPORT OF INVESTIGATIONS
NUMBER 2**



GEO-MARINE, INC.



DTIC QUALITY INSPECTED 3



Above: Early 1900s photograph of Quanah Parker's Star House on Fort Sill Military Reservation (courtesy of Fort Sill Museum).

Cover: Photograph of Quanah Parker's Star House near Cache, Oklahoma (Photo #3773, courtesy of Archives and Manuscripts Division of the Oklahoma Historical Society).

ERRATA

1992-1993 Cultural Resources Inventory of 17,063 Acres Within 11 Selected Areas of the Fort Sill Military Reservation, Fort Sill, Oklahoma

Page iii, third paragraph, should correctly read, "Although assessment of eligibility for inclusion in the National Register of Historic Places is preliminary due to the lack of test excavation data, the site components have been categorized as "ineligible," of "unknown eligibility," "eligible," or "indeterminate." Only one of the 77 sites is considered eligible for inclusion in the NRHP: site (34Cm-443) is a swimming pool and associated structural remains at Craterville Park, a regional amusement park which was open from 1922 to 1956. This site has been recommended for preservation. Eight prehistoric sites (34Cm-447, 34Cm-458, 34Cm-459, 34Cm-465, 34Cm-475, 34Cm-476, 34Cm-484, and 34Cm-487), four multicomponent sites (34Cm-454, 34Cm-460, 34Cm-480, and 34Cm-498) and twenty-three historic sites (34Cm-162, 34Cm-358, 34Cm-444, 34Cm-446, 34Cm-450, 34Cm-456, 34Cm-464, 34Cm-468, 34Cm-472, 34Cm-481, 34Cm-482, 34Cm-486, 34Cm-488, 34Cm-489, 34Cm-492, 34Cm-493, 34Cm-494, 34Cm-495, 34Cm-496, 34Cm-497, 34Cm-499, 34Cm-500, and 34Cm-503) have been designated as "unknown" in relation to National Register eligibility. Further research, the type of which varies according to the site, is necessary for a final determination of eligibility for these properties. Thirty-eight sites (seven of which are of the historic period, four of which are multicomponent, and 27 of which consist of low-density prehistoric lithic scatters) were determined to be ineligible due to a lack of contextual integrity, a lack of sufficient archeological deposits, or a lack of association with important events or persons. The NRHP eligibility of three prehistoric lithic scatters was not assessed and remains indeterminate, because the presence of unexploded ordnance on these sites made examination dangerous to field personnel. All of the localities are ineligible for nomination to the National Register of Historic Places."

Page 169, third paragraph, fourth sentence should be changed to: "Because of this site's current lack of integrity, it must be considered to be ineligible for inclusion in the NRHP. No further work is recommended at site 34Cm-310."

Page 264, entry for site 34Cm-289: Change NRHP Eligibility from "Ineligible" to "Unknown." Also, change Site Management from "No Further Work" to "Indeterminate."

Page 264, entry for site 34Cm-290: Change NRHP Eligibility from "Ineligible" to "Unknown." Also, change Site Management from "No Further Work" to "Indeterminate."

Page 267, entry for site 34Cm-471: Change NRHP Eligibility from "Ineligible" to "Unknown." Also, change Site Management from "No Further Work" to "Indeterminate."

Page 269, notice *"Indeterminable due to presence of unexploded ordnance"* at the end Table 4 should be deleted.

Page 286, the first part of the last paragraph should modified in part to read "The eligibility of three prehistoric lithic scatters (34Cm-289, 34Cm-290, and 34Cm-471) remains indeterminate, because of the presence of unexploded ordnance on the sites at the time of the survey. The remaining 38 sites are considered ineligible for inclusion in the NRHP. These sites..."

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OF THE FORT SILL MILITARY RESERVATION,
FORT SILL, OKLAHOMA**

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and

U.S. ARMY CORPS OF ENGINEERS
TULSA DISTRICT

FORT SILL MILITARY RESERVATION TECHNICAL SERIES
REPORT OF INVESTIGATIONS NUMBER 2

Geo-Marine, Inc.
550 East Fifteenth Street
Plano, Texas
75074

September 1995

CONTRACT DATA

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MANAGEMENT SUMMARY

This report presents the results of an intensive archeological survey of 17,068 acres located within 11 parcels of land on the Fort Sill Military Reservation in Comanche County, Oklahoma. Archival research and informant interviews were also conducted to identify potential historic sites and to assess the significance of recorded historic sites. The cultural resource assessments presented here represent one phase of the efforts of the Fort Sill Military Reservation to meet its legal responsibilities for the identification, evaluation, and treatment of cultural resource properties under its jurisdiction. This research was conducted under contract with the U.S. Army Corps of Engineers, Tulsa District. The intensive survey and the associated research was conducted by the Cultural Resources Division of Geo-Marine, Inc., between August and October of 1992.

The survey resulted in the identification and recording of 77 archeological sites (with 82 site components) and 51 localities. Of these cultural resource properties, 42 site components and 18 localities date to the prehistoric period, and 40 site components and 29 localities are of the historic period; four of the localities were multicomponent, exhibiting both prehistoric and historic artifacts. Twenty-one sites and six historic ruins had been previously recorded within the 11 parcels of land; yet, this survey was able to relocate only 14 sites and four ruins. The surficial and fragile nature of the archeological record within this region and the more than 100 years of military training activities have been the primary factors affecting site visibility and survival.

Although assessment of eligibility for inclusion in the National Register of Historic Places (NRHP) is necessarily preliminary due to the lack of test excavation data, the site components have been categorized as "ineligible," of "unknown eligibility," or "eligible." Only one of the 77 sites is considered eligible for inclusion in the NRHP: site 34Cm-443 is a swimming pool and associated structural remains at Craterville Park, a regional amusement park that was open from 1922 to 1956. This site has been recommended for preservation. Eight prehistoric sites (34Cm-447, 34Cm-458, 34Cm-459, 34Cm-465, 34Cm-475, 34Cm-476, 34Cm-484, and 34Cm-487), four multicomponent sites (34Cm-454, 34Cm-460, 34Cm-480, and 34Cm-498) and twenty-three historic sites (34Cm-162, 34Cm-358, 34Cm-444, 34Cm-446, 34Cm-450, 34Cm-456, 34Cm-464, 34Cm-468, 34Cm-472, 34Cm-481, 34Cm-482, 34Cm-486, 34Cm-488, 34Cm-489, 34Cm-492, 34Cm-493, 34Cm-494, 34Cm-495, 34Cm-496, 34Cm-497, 34Cm-499, 34Cm-500, and 34Cm-503) have been designated as "unknown" in relation to National Register eligibility. Further research, the type of which varies according to the site, is necessary for a final determination of eligibility for these properties. The remaining 41 sites (seven of which date from the historic period, four of which are multicomponent, and 30 of which consist of low density prehistoric lithic scatters) were determined to be ineligible due to a lack of contextual integrity, a lack of sufficient archeological deposits, or a lack of association with important events or persons. All of the localities are ineligible for inclusion in the NRHP.

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CHAPTER 1

INTRODUCTION

by
Duane E. Peter, Gathel M. Weston, and Floyd B. Largent, Jr.

This report represents the results of an intensive cultural resources survey of 17,068 acres located on the Fort Sill Military Reservation in Comanche County, Oklahoma (Figure 1). In addition, archival research was conducted to assess the possible significance of potential sites identified from historic documents. This work was conducted under Delivery Order No. 1 of Contract No. DACW56-92-D-0010, by the Cultural Resources Division of Geo-Marine, Inc. (GMI), of Plano, Texas. This survey was conducted between August 10, 1992, and October 26, 1992.

The Fort Sill Military Reservation, as a federally owned installation, has a responsibility for managing approximately 95,000 acres of land in southwestern Oklahoma. The report presented herein is in compliance with several mandates connected with this management responsibility. These directives are defined in the *National Historic Preservation Act of 1966* (PL 89-665 et seq.); the *Archaeological and Historic Preservation Act of 1974* (PL 93-291 et seq.); Executive Order No. 11593, "Protection and Enhancement of the Cultural Environment"; and Army Regulation 420-40, "Historic Preservation."

Personnel from GMI, conducted the field investigations at Fort Sill under the direction of the Principal Investigator, Duane E. Peter, and the Project Archeologist, Gathel M. Weston. Gary Shaw and Sherrian K. Edwards acted as field supervisors. Ten areas were originally selected for the cultural resource survey at Fort Sill. Of the 16,948 acres originally designated for survey in Areas 1-10 (see Figure 1), all but approximately 70 acres in Area 4 were surveyed; the 857 acres of Survey Area 9 were replaced with the 831-acre Survey Area 11. The 70 acres of Area 4 that were not surveyed are located in an area bordering East Branch Wolf Creek, which has a high potential for containing unexploded ordnance. An equivalent area of land, consisting of a parcel at the northern boundary of Survey Area 4, was surveyed instead. In addition, a parcel of land totaling 110 acres within the cantonment area was added to the survey.

The survey effort was conducted by the Project Archeologist, the two field supervisors, and nine crew members. An estimated total of 440 person days (field supervisors and crew) was expended between August 10, 1992, and October 26, 1992, conducting systematic survey and selective shovel testing. As a result of this survey 77 cultural resource sites were discovered and recorded, with a minimum of 90 components represented (46 prehistoric components and 44 historic components). In addition, 51 nonsite localities were recorded. Almost all the sites show some degree of disturbance, ranging from light to heavy impacts. Many had been impacted within the six months prior to their discovery.

1992-1993 Cultural Resources Inventory: Fort Sill, Oklahoma

Archival research and informal interviews were conducted along with the field work relating to the historic sites discovered during the field research. This information was used as well to predict potential sites and to relocate previously recorded sites. Twenty-one sites and six ruins had been previously recorded within the 11 areas designated for this cultural resource survey; however, this survey was able to relocate only 14 of these sites and four of the ruins. Many of the sites had been recorded in the late 1950s, the early 1960s, and late 1970s. Impacts to these sites are multiple, and many appear to have been simply collected away.

This report is presented in seven chapters. Chapter 2 presents the environmental setting of the study area. Chapter 3 documents the cultural setting for the survey area, with a particular emphasis on the Comanche and their impact on the region. Chapter 4 outlines the conceptual framework and research methodologies that guided these research efforts. The results of geologic fieldwork conducted on the Fort Sill Military Reservation are presented in Chapter 5. Site descriptions, analysis of historic and prehistoric artifacts, and the results of the archival research are presented in Chapter 6. A summary of the findings and site assessments and recommendations are presented in Chapter 7. Appendix A presents the definitions of prehistoric artifact classes, an example of the coding form used for prehistoric artifact analysis, and the summary table for prehistoric artifacts. Appendix B presents the summary table of historic artifacts, and Appendix C presents descriptions of all nonsite localities. Appendix D provides geological profile descriptions.

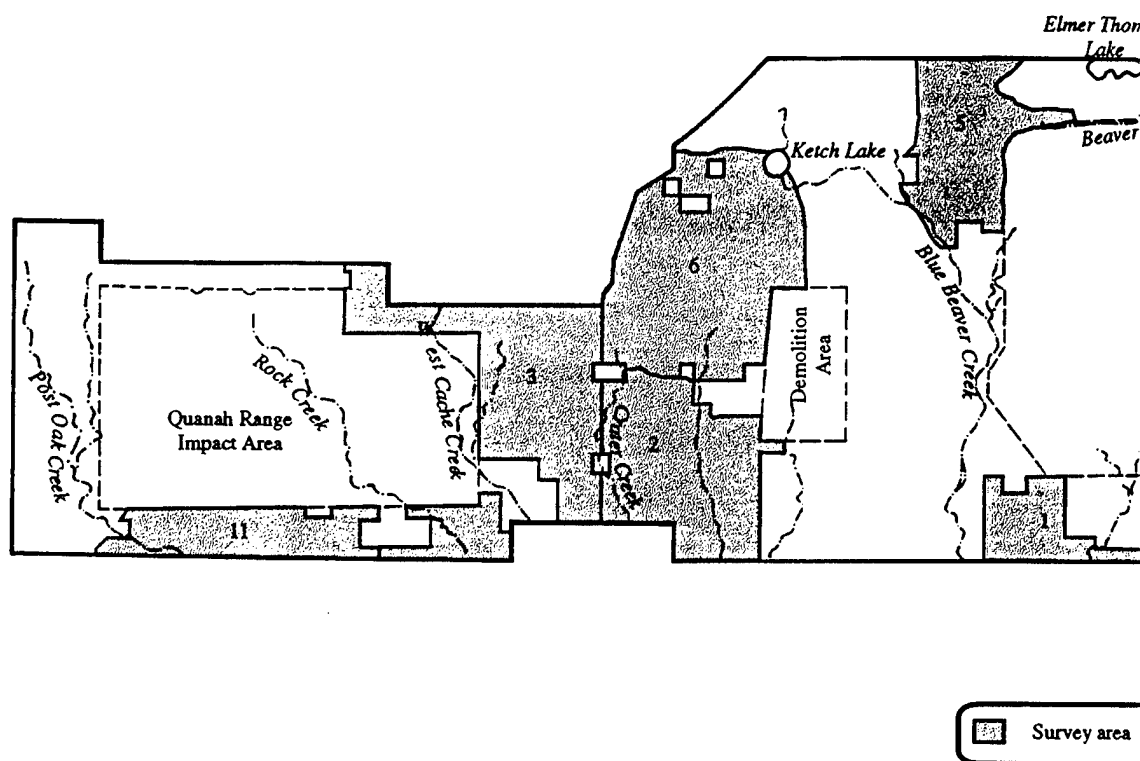
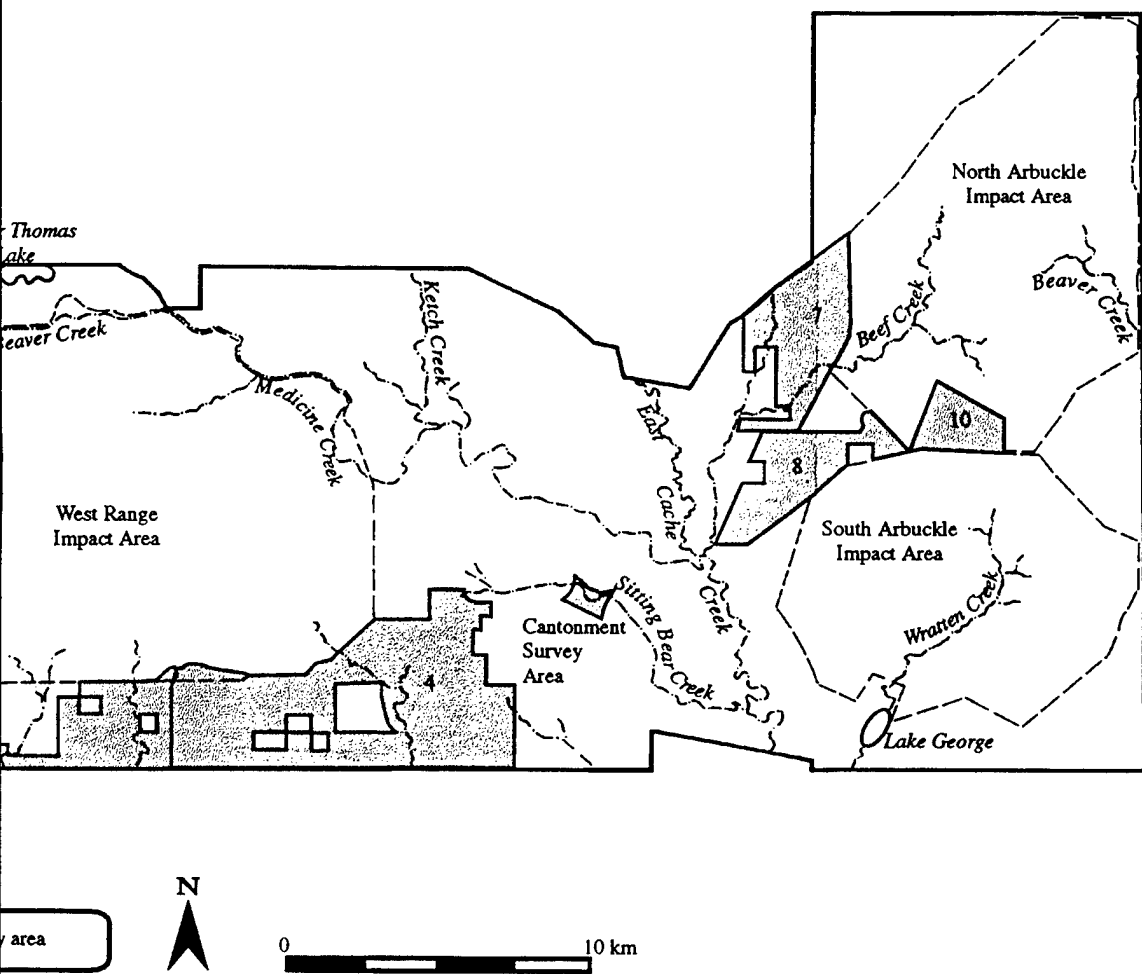


Figure 1. A map of the Fort Sill Military Reservation, showing the locations of intensive pedestrian and geological areas surveyed during the 1990s.



the 1992 investigations.

CHAPTER 2

ENVIRONMENTAL SETTING

by
Gathel M. Weston

GEOLOGY AND GEOMORPHOLOGY

The near-surface bedrock in the Fort Sill area consists of Permian age formations that extend east-west from central Oklahoma to the Llano Uplift in the Texas Panhandle, and north-south from Nebraska to central Texas (Gould and Lewis 1926). Bordered by marine deposits of Pennsylvanian age on the east and nonmarine Tertiary deposits in the west, the Permian formations are primarily level sedentary beds derived from continental deposits overlying marine deposits. However, there is much variation, including some areas that are primarily marine in origin (Weissenborn and Stenzel 1948:12).

The Permian formations correspond to a large extent with the tall grass prairie and mixed grass plains of central and western Oklahoma. The Pennsylvanian formations underlie much of the Cross Timbers and, with the Ozark and Ouachita mountains, the eastern forests of Oklahoma. The Tertiary-aged deposits to the west, formed from sediments derived from the Rocky Mountains, underlie the short grass high plains.

Within the Fort Sill Military Reservation itself, shale with some sandstone composes the bedrock east of East Cache Creek (Dames and Moore 1980:19) and the Post Oak Conglomerate of the Hennessey Group forms the bedrock of the reservation west of East Cache Creek and south of the Wichita Mountains (Coffman et al. 1986:4). This conglomerate is composed of bedded pebble- to boulder-sized clasts that fine outward from the Wichita Mountains (Gilbert and Donovan 1982:86-89). The clasts are for the most part granite and rhyolite, with sandstone and mudstone clasts in a limited area along East Cache Creek (Dames and Moore 1980:19).

The eastern range of the Wichita Mountains extends into the Fort Sill Military Reservation. Except for the section that has been exhumed by erosion, most of this mountain chain remains buried under Permian-aged and older sediments. Composed of basalt, granite, rhyolite, and gabbro, these ancient mountains appear to be little more than hills, impressive by their location within the level plains rather than any absolute prominence. However, up close they present a steep and formidable terrain, with numerous cliffs, narrow gorges, and steep, boulder-strewn slopes. A more detailed description of this igneous formation is presented in Chapter 5.

Limestone, which has only a limited distribution in the Fort Sill area, has been economically significant during historic times. Quarry Hill, Evans Knob, and McKenzie Hill are all composed of limestone and

have been quarried in the past (Dames and Moore 1980:19). Kerr Hill and a few other small areas are also formed of limestone.

TOPOGRAPHY

The topography in the Fort Sill area ranges from the gently rolling plains of the Permian Red Beds to the steep and rugged terrain of the Wichita Mountains. The following discussion of the topography of Fort Sill is based on the terrain analysis conducted by Dames and Moore (1980:3-7).

The western, south-central, and eastern portions of Fort Sill, including the cantonment area, consist of nearly level to gently rolling plains ranging in elevation from 350 and 430 m (1,150 ft to 1,410 ft) above mean sea level (amsl) with a maximum elevation of 466 m (1,528 ft) amsl and a minimum elevation in this area, and for Fort Sill, of 329 m (1,079 ft) amsl. Local relief generally ranges between 20 and 40 m amsl.

The north-central part of the Fort Sill Military Reservation, the northern boundary of the western portion of the reservation, and the northern boundary of the cantonment area are dominated by gently to moderately rolling plains and hills with some areas deeply incised by upland drainages. Elevations generally range between 380 and 480 m (1,246 ft to 1,574 ft) amsl with maximum elevation of 553 m (1,814 ft) amsl and a minimum elevation of 342 m (1,122 ft) amsl. Local relief varies between 50 m and 70 m amsl, with a maximum local relief of 140 m amsl.

The Wichita Mountains dominate the west-central portion of Fort Sill. This area is characterized by moderately to strongly rolling hills exhibiting abundant rocky outcrops and rounded crests. Elevations in this area generally range between 420 and 620 m (1,378 ft to 2,034 ft) amsl with a minimum of 380 m (1,246 ft) amsl and a maximum for this area, and for Fort Sill, of 673 m (2,207 ft) amsl. Local relief ranges between 180 and 220 m (590 ft to 722 ft) with a maximum of 250 m (820 ft) amsl.

SOILS

There are three major soil associations within the Fort Sill Military Reservation: Tillman-Vernon soils, Granitic Mountains-Tishomingo soils, and Rough broken land-Vernon soils (Oklahoma Water Resources Board 1980:54a; Mobley and Brinlee 1967). The dominant soil association on the reservation is the Tillman-Vernon association, dark to reddish soils with clay subsoils developing from clayey Red Beds. Confined primarily to the Wichita Mountains, Granitic Mountain-Tishomingo soils are stony granitic soils that have a thin soil layer and are brown in color. Rough broken land-Vernon soils are found east of East Cache Creek. These soils are similar to the soils found in the Tillman-Vernon association, but have a thinner soil layer and more extensive erosional areas.

According to the Conservation Plan for Fort Sill (U.S. Department of Agriculture, Soil Conservation Service [USDA, SCS] 1970), the Tillman-Vernon association contains the Foard series silt loams, Hollister series loams, Lawton series loams, Lucien series loams, Stamford series clayey soils, Tillman series clay loams, Vernon series clays, and Zaneis series loams. Approximately 20 percent of the sites recorded during the current survey fall within areas containing these soils.

The Rough broken land-Vernon association contains small areas of breaks-alluvial land complex (loamy to clayey upland soils on broken and moderately steep slopes) interspersed with Zaneis series loams, Vernon clays, eroded loamy land, and the Lucien-Zaneis-Vernon complex (sloping to strongly sloping soils

on dissected, erosional uplands). Only a small area containing this soil association is located within the reservation boundaries. A very small part of the current survey covered this soil association; approximately four percent ($n=3$) of the sites recorded during the current survey fall within areas containing these soils.

The Granitic Mountain-Tishomingo soil association is confined to the Wichita Mountains in the western portion of the Fort Sill reservation. Included in this region are granite cobbly land, granite outcrop, rock land, and stony rock land. Granite cobbly land can also be found in other areas outside the Granitic Mountain-Tishomingo soil association, particularly near Medicine Bluff and Rabbit Hill. Forty-two percent of the sites recorded are located on Granitic Mountain-Tishomingo soils.

Other soils occur on the Fort Sill Military Reservation that can not be placed in the above associations. Two soils, the Konawa series loamy fine sand and Windthorst series sandy loam, are generally associated with each other and Lawton loam. The current survey covered only a few small areas containing Konawa and Lawton soils; 2.5 percent of the recorded sites are located on Konawa soils, while 6.5 percent occur on Lawton soils. A third soil series is the alluvial loams within the Port series. These soils are found in all the bottomlands within the reservation and along all but the lowest order of drainages. Twenty-five percent of the sites recorded during the current survey are on Port series soils; in addition, a large percentage of the sites located on nonalluvial soils are located at or near the boundary with Port soils. A fourth soil, limestone cobbly land, occurs in small quantities on the plains south of the Wichita Mountains. No sites were associated with this soil.

Port series soils are the most agriculturally productive soils located on the Fort Sill reservation. Other soils that are suitable for cultivation are the Foard, Hollister, Konawa, Lawton, Stamford, Tillman, Vernon, Windthorst, and Zaneis soils. Soils on the reservation that are unsuitable for cultivation include the breaks-alluvial land complex, eroded clayey land, eroded loamy land, granite cobbly land, limestone cobbly land, Lucien soils, rock land, and stony rock land.

HYDROLOGY

The Fort Sill area is located within the Red River drainage basin. Locally, more than 90 percent of the reservation is within the East Cache Creek basin, with a small portion of the eastern end within the Beaver Creek drainage basin (Dames and Moore 1980:3). Moving from east to west, the watercourses within the reservation are Ninemile Beaver Creek, Wrattan Creek, Beef Creek, East Cache Creek, Sitting Bear Creek, Medicine Creek, Ketch Creek, East Branch Wolf Creek, Deer Creek, Blue Beaver Creek, West Branch Blue Beaver Creek, Crater Creek, Quanah Creek, West Cache Creek, Rock Creek, and Post Oak Creek. There are a number of other small ephemeral streams and over 50 reservoirs on the military reservation.

Except for Sitting Bear, Medicine, and Deer creeks, watercourses on the reservation tend to flow from north to south. East Cache Creek and Medicine Creek are the only perennial streams, with other streams having only ephemeral or seasonal flow (Dames and Moore 1980:3). The watercourses within the cantonment area have undergone extensive modification of their channels, including straightening of meanders and concrete lining of portions of Sitting Bear Creek and channelization of East Cache Creek.

The current survey included portions of West Branch Wolf Creek, East Branch Wolf Creek, West Branch Blue Beaver Creek, Quanah Creek, Rock Creek, West Cache Creek, Blue Beaver Creek, Deer Creek, Beef Creek, Post Oak Creek, and Sitting Bear Creek.

CLIMATE

Southwestern Oklahoma exhibits a semi-arid to sub-humid continental climate with influences from three upper air systems. Dry air enters the region from the Rocky Mountains to the west; cold, dry arctic air enters from the north; and warm, moist air from the Gulf of Mexico enters from the south. These three air masses meet over the Southern Plains and create a weather pattern that is marked by long, hot summers and short, mild winters, with rapid weather changes and occasional periods of intense drought. Severe winter storms are rare in the Fort Sill area, but the warmer months are often marked by strong, often violent, storm systems (Hofman et al. 1989:8).

Mean annual rainfall ranges from approximately 86 cm (34 in) at the eastern edge of the southwest Oklahoma region to 66 cm (26 in) at the western edge, with mean annual rainfall in the Fort Sill area measures approximately 76 cm (30 in) (Kawecki and Wyckoff 1984:7). Rainfall is at a maximum during the spring months with a sub-maximum in August or September (Albert and Wyckoff 1984:18-29). The observed range of annual rainfall, recorded in the Wichita Mountains Wildlife Refuge over a 55-year period, is from 38 cm (15 in) in 1910 to 146 cm (57.5 in) in 1908 (Crockett 1964:328). Evapotranspiration generally exceeds precipitation in the Southern Plains region (Hofman et al. 1989:9) with the rate exceeding 90 cm (36 in) annually in the Fort Sill area (Kawecki and Wyckoff 1984:7). The mean annual temperature for the Fort Sill area is approximately 16.2° C (61.1° F), with a range of 27.8° C (82.1° F) in July and August, to 4.2° C (39.6° F) in January (Crockett 1964:328). There are approximately 220 frost-free days annually.

FLORA AND FAUNA

The Fort Sill Military Reservation is located within the Mixed Grass Plains of the Southern Plains, a transitional area between the Tall Grass Prairies to the east and the Short Grass Plains to the west. While this area can be considered an ecotone between the tall grass region and the short grass areas, the transition is gradual, with a slow replacement of tall grass plant species by short grass plant species from east to west as the available moisture decreases. The tall and mixed grasslands are considered as a unit in some classifications (Shelford 1963:329). The entire tall grass/mixed grass region can be described as an ecotone between the eastern forests and the western high plains, with a mixture of eastern and western influences (Rice and Penfound 1959:605). Within the tall grass and mixed grass regions the type and mix of faunal species are similar, with a transition to short grass faunal types at the boundary between the high, short grass plains and low, mixed grass plains (Shelford 1963:334-335).

The Fort Sill Military Reservation has three basic floral environments: grassland, riparian forest, and upland woodland. The grasslands consist of both mixed grass plains and tall grass prairie. The tall grass prairie is found primarily east of East Cache Creek on soils derived from the Permian Red Beds. This area is dominated by a mixture of grasses typical of a tall grass prairie (Bamforth 1988:32; Kawecki and Wyckoff 1984:3); little blue stem and big blue stem dominate, and smaller amounts of silver blue stem and switch grass are present (Ferring 1978:76-117).

The grassland areas west of East Cache Creek are primarily mixed grasses on soils derived in part from sediments from the Wichita Mountains. Little blue stem is still the dominant grass variety, but little or no big blue stem is present, and mid-grass and short grass species, such as drop seed and hairy grama grass, occur in greater numbers (Baugh 1984:16-18; Ferring 1978:76-117). Before European settlement of the region these grasslands would have supported herds of bison, low numbers of antelope, lesser prairie chicken, and jackrabbit.

The riparian forests in the study area support a floral community similar to that recorded for bottomland forests in tall grass prairie/mixed grass plains of north-central Oklahoma (Rice 1965). On the reservation, American elm is dominant in seven of ten stream channels surveyed by the Museum of the Great Plains (Ferring 1978:82-104) as compared to 38 of 47 bottomland forest stands surveyed in north-central Oklahoma (Rice 1965:710). Nettleleaf hackberry is the dominant species on East Cache Creek but is possibly a recent invader on the disturbed floodplain (Rice and Penfound 1959:597). Bur oak dominates on Ketch Creek and also occurs on Medicine and Sitting Bear creeks, and Shumard's oak is the dominant woody species on Beef Creek. Neither bur oak nor Shumard's oak dominate in any of the stands studied in north-central Oklahoma and neither species was recorded in the Wichita Mountains Wildlife Refuge (Buck 1964); their dominance on these two stream floodplains may be a historic phenomena. Economically important species present on the floodplains as sub-dominants or lower quantities include pecan, black walnut, western hackberry, common persimmon, and red cedar. With the exception of two species of oak, the riparian forests within the study area are typical of bottomland forests within the tall grass prairie/mixed grass plain region. The undergrowth recorded during the Fort Sill survey and Rice's survey in north-central Oklahoma is similar, with poison ivy/oak, wild rye, and coralberry common and *Smilax* spp., *Vitis* spp., and common elderberry present. Deer and turkey are two important faunal species that inhabit the riparian environment. Additional species such as opossum, squirrel, and raccoon inhabit the riparian forests, with mussels and fish available from the streams themselves.

The upland woodlands of the study area are essentially a Cross Timbers type vegetation. The western edge of the Cross Timbers region itself is currently located approximately 25 to 30 km east of Fort Sill, with the Wichita Mountains maintaining a western isolate of this upland woodland type. On the basis of studies conducted within the Wichita Mountains Wildlife Refuge (Buck 1964), post oak is the dominant woody species within the refuge with blackjack oak a subdominant. This dominance of post oak over blackjack oak is typical of the mixture seen in the main body of the Cross Timbers, whereas other upland woodlands in western Oklahoma are dominated by blackjack oak (Rice and Penfound 1959:603). On the other hand, the upland woodlands of the Wichita Mountains are similar to other western Oklahoma upland woodlands in that neither contains black hickory, an important species in the main body of the Cross Timbers (Wyckoff 1984:8). More pertinent to prehistoric utilization of the region is that the woodlands within the Wichita Mountains are more dense than the woodlands found in surrounding areas (Rice and Penfound 1959:601), offering a greater concentration of resources. There are three species within the Wichita Mountains that are rare within the mixed grass plains. Sugar maple (Buck 1964:340) and chinquapin oak (Rice and Penfound 1959:599) occur in significant numbers on north-facing slopes, and western walnut is present in valleys (Buck 1964:344). Sugar maple in particular is a rare occurrence outside the forests of eastern Oklahoma (Rice and Penfound 1959:606).

The upland woodlands in the Wichita Mountains offer excellent habitat for economically important faunal species, in particular white-tailed deer and wild turkey. White-tailed deer favor forest edges and open woodlands (Schmidly 1983:294) and this type of environment is available in abundance in the Wichita Mountains (Buck 1964). Buck (1964:340) noted the many deer within the refuge and their impact on vegetative understory. The oaks that are dominant within the Wichita Mountains are an important food source for a variety of animals. Oak twigs and young leaves provide forage for deer and rabbits (Schmidly 1983:297) and acorns provide a large portion of the food consumed by a wide variety of animals including deer, wild turkey, prairie chicken, and squirrels (Petrides 1958:296). Both the acorns and the fauna they attract would have provided an important food source for aboriginal populations as well.

LITHIC RESOURCES

Chert is unknown in primary outcroppings within the study area. While sedimentary formations known to contain chert occur in the area, no chert sources within the outcroppings have been located (Banks 1990:104). The primary local source of lithic raw material is gravel veneers containing quartzite and chert derived from the Ogallala/Potter formations (Banks 1990:114) and possibly from local sources such as the Meers quartzite. The exact distribution of these gravels within the study area, their effect on prehistoric site distribution, and the extent of aboriginal usage of these gravels is unknown. A number of sites identified within the study area appear to be lithic procurement sites that were exploited for their deposits of quartzite and chert cobbles (Ferring 1978).

Igneous rocks provided a limited amount of lithic raw material but are less than ideal for chipped stone tools, though adequate for ground stone tools. Quartz, available as outcrops at the southern edge of the Wichita Mountains (Banks 1990:104-105) and in gravel veneers and stream channels, was often utilized by aboriginal populations.

SUMMARY

The Wichita Mountains and the surrounding area contain a disparate range and quantity of resources. Some resources, such as faunal and floral species, were available in high quantities, while other items, in particular lithic resources, are extremely limited. Limitations are also imposed by the relatively limited water resources (Bastian 1966:3) and low acreage of fertile alluvial soils. These are balanced on the other hand by the potentially high populations of white-tailed deer and other faunal species dependent on the oak forests and woodlands, and the high levels of forest products, especially when compared to adjoining western and southern regions. These forest products include sugar maples that are extremely rare west of the eastern forests of Oklahoma. Floral resources would have been at their greatest potential in the fall (Ferring 1978:29) with faunal resources greatest from fall to mid-winter (Speth and Spielmann 1982).

In the Fort Sill area, floral and faunal resources are similar to those found in areas located to the northeast and east. The Washita and Canadian river valleys would have offered similar resources, along with a more dependable water resource and greater coverage of alluvial soils suitable to aboriginal horticultural practices. On the other hand, river valleys to the south and west of the study area have bottomland vegetation less suitable to the maintenance of a large population of small and medium game animals. The Red River valley supports bottomland vegetation similar to the high plains bottomlands, with a dominance of cottonwood and scrub growth hackberry and limited stands containing elm and pecan (Sellards et al. 1923:130-131). Oak trees and wooded uplands are completely absent and the grassland contains species more typical of the short grass plains (Sellards et al. 1923:130-153).

The Wichita Mountains likely would have provided a wide selection of resources to the aboriginal inhabitants of the upper Red River valley and other western regions that were otherwise unavailable or seasonally scarce. There is little evidence that the area was ever intensely occupied by horticultural groups associated with the populations that utilized river valleys to the north and west of the Fort Sill area. However, it is likely that at particular times populations from this area exploited the available resources in the Wichita Mountains area. The regional affiliations of the groups that did utilize the area, particularly in late prehistoric times, need further work and clarification.

CHAPTER 3

CULTURAL SETTING

by
Kimberly L. Kane

The general cultural history of Fort Sill and the previous investigations conducted within the military reservation have been dealt with extensively in prior volumes in this technical series (Austin and Peter 1992; Peter and Weston 1993); therefore, this information will not be repeated here. It seems more pertinent instead to detail the history of the current project area, with particularly emphasis on the native Comanche and their impact on the region.

Most of the current project area is situated on land acquired by the government in the 1950s. The land was once part of the Kiowa-Comanche reservation, created as a result of the Treaty of Medicine Lodge in 1867. Following ratification of the Jerome Agreement in 1900, reservation lands were allotted to the Kiowa and Comanche. Each individual chose a 160-acre parcel of land as his or her allotment. The westernmost area of the project area is located on a portion of the reservation where most, if not all, allotments were chosen by Comanche. Lands left over after allotment were opened for homesteading in 1901. Quanah Parker, the only person ever to be designated Comanche Chief, lived within the project area with his several wives and many children. During the early to middle twentieth century, Euro-Americans homesteaded within the current project area, and miners actively searched for gas, oil, quartz, gold, and other minerals. Craterville Park, a combination amusement park, camp ground, and fair grounds, was established within the project area in the 1920s. Between 1924 and 1932 this park, owned by well-known local citizen Frank Rush, was the scene of the All-Indian Fair, precursor of the present-day American Indian Exposition at Anadarko.

CONTACT TO THE ESTABLISHMENT OF THE REPUBLIC OF TEXAS (CA. 1700-1836)

The Comanche, allotted lands in the current project area between 1900 and 1901, were one of several Native American groups, including the Kiowa, Kiowa-Apache (now the Apache Tribe of Oklahoma), and Wichita, that inhabited present-day Comanche County during the eighteenth and nineteenth centuries.¹ The

¹ The reader should be aware that much remains to be learned about Comanche history and culture, and that most, if not all, readily available information about Comanche culture and history is the product of Euro-American authors. This summary of Comanche history is intended only as a brief overview of the complex topic. More detailed information can be found in the references cited section of this document. In particular, the works of W. T. Hagan, E. A. Hoebel, and E. Wallace are recommended as an introduction to the subject.

Comanche are a Shoshonean people who began a southward migration to the Great Plains from the Great Basin in the seventeenth century (Faulk 1991:271; Gibson 1980:79; Kehoe 1981:121, 278, 287; Wallace and Hoebel 1952). A nomadic people who relied heavily upon buffalo (Hoebel 1940:118), they became one of the first groups to obtain horses, procuring them from the Spanish in the 1600s. The horse was an important factor in the adaptation of the Comanche to life on the Great Plains, enabling more goods to be moved over greater distances, and making it possible for buffalo hunting to become the major means of Comanche subsistence. The Comanche facilitated the spread of horses to other Native American groups, trading the animals to the Shoshoni, the Pawnee, and Wichita (Kehoe 1981:287-288). By 1700, along with the Kiowa, the Comanche had become skillful raiders of Mexican settlements to the south and west (Gibson 1980:104). By 1750, they inhabited an area between the Platte and Red rivers (Wright 1951:121) and the Comanche culture had adapted to life on the plains. Approximately a hundred years later, they had extended their sphere of influence across an area that was

bounded on the north by the Arkansas River, on the west by a line extending from the headwaters of the Arkansas River southward near the Mexican settlements of Taos and Santa Fé, on the southwest by the Pecos River, on the southeast by the white settlements in the vicinity of San Antonio, Fredericksburg, and Austin, and on the east by the Cross Timbers . . . an area more than six hundred miles from north to south and four hundred miles from east to west [Wallace and Hoebel 1952:12].

At one time or another during their southward migration, the Comanche encountered and fought with the Ute, the Jicarilla, the Cheyenne and Arapaho, the Osage, Tonkawa, Jumano, and Apache. The Kiowa, migrating south at the same time, became enemies and remained adversaries until approximately 1790, when a peace treaty was concluded between the two groups (Hagan 1976:12; Wright 1951:121). Once the Comanche reached a location south of the Washita and Red rivers, they met and generally maintained friendly relations with the Wichita, Waco, Tawakoni, and Kichai (Wallace and Hoebel 1952:286-287, 289).

The Apache, though, in particular suffered from the aggressive southward expansion of the Comanche. According to historian Odie B. Faulk, Spanish historians asserted that the Comanche won their first decisive victory against the Apache in a 1725 battle on the Wichita River (Faulk 1991:271; Wallace and Hoebel 1952:288). The Apache eventually were forced southward to the area in and around San Antonio by the Comanche, and by the mid-eighteenth century some Apache "found themselves so hard-pressed by the Comanche that they had sought an alliance with the Spanish--or at least what would appear to the Comanche as an alliance" (Faulk 1991:273). The apparent Spanish alliance with the Apache (in addition to the acquisition of horses and other booty) provided incentive for the Comanche to attack the Spaniards. The Comanche reached San Antonio in 1743, but apparently no battle was fought at that time. In the mid-eighteenth century, the Comanche, likely encouraged by the French, attacked the Spanish mission on the San Sabá River (Faulk 1991:271-276). In response to the attack, Colonel Don Diego Ortíz de Parilla led a punitive expedition against the Comanche in 1759. Parilla, along with 134 Apache and a total of over 500 other fighting men, was defeated after a day-long engagement with a group of Comanche and their allies, who were equipped with French guns and protected by a stockade flying the French flag. Parilla and the men who did not desert during this engagement retreated, pursued by the Comanche and their allies (Faulk 1991:276-278).

After the 1762 transfer of Louisiana from France to Spain, the Spanish changed their policy toward the Comanche, attempting to form an alliance with them and against the Apache. They succeeded in making the Comanche generally friendly toward the inhabitants of New Mexico, who replaced the French as important trading partners of the Comanche (Wallace and Hoebel 1952:289-290).

The Comanche began trading with Americans around 1815. The earliest American known to have traded in Oklahoma with the Comanche was General Thomas James, who established his business in 1822, probably either in present-day Blaine County or in what is now Dewey County (Wright 1951:121). In present-day Kiowa County on the North Fork of the Red River, the Comanche met for the first time with an official representative of the United States in 1834, when Colonel Henry Dodge of the Dragoon Expedition arrived at a Comanche encampment along Cache Creek (Nye 1969:7). The next year, the Comanche signed their first treaty with the United States at Camp Holmes on the Canadian River. The treaty specified that the Comanche would allow United States citizens safe passage through Comanche lands and would allow eastern tribes, forced westward by Euro-American expansion, to use Comanche hunting grounds (Hagan 1976:10; Nye 1969:12; Wallace and Hoebel 1952:291-292; Wright 1951:121).

REPUBLIC OF TEXAS TO THE CIVIL WAR (1836-1861)

Until the mid-1830s, the Comanche preferred to trade with Euro-Americans in Texas rather than to raid their settlements. However, as settlements grew more numerous and spread deeper into Comanche territory, the Comanche began to view Euro-American settlers as their enemies as well as potential sources of horses and other booty. Comanche raids upon Euro-American settlers in Texas began in 1835. After the founding of the Republic of Texas in 1836, President Sam Houston attempted for two years, without success, to obtain and have ratified a treaty with the Comanche. A second attempt at peace negotiations between the Comanche and Texans ended in the deaths of over 32 Comanche warriors and their leaders in Bexar, resulting in an intensification of Comanche-Texan hostilities. Yet another agreement to cease hostilities and resume trading was made in 1844; however, it did not end the violence for long (Wallace and Hoebel 1952:292-295), and raids continued after the annexation of Texas to the United States in 1845.

A treaty to promote trade and peace was signed in 1846 by members of one Comanche band and the United States. Among other things, the United States promised the Comanche \$10,000 worth of gifts (Wallace and Hoebel 1952:297). Relative peace was maintained until approximately 1849. In that year devastating epidemics of smallpox and cholera struck the tribe, causing the deaths of approximately half of all Comanche, including many prominent leaders (Hagan 1976:12-13). It is suspected that the cholera epidemic was related to contact with some of the thousands of miners who traveled across Comanche territory on their way to California during the 1849 gold rush (Hagan 1976:12-13). The Comanche population is estimated to have been between 15,000 and 20,000 during the early and mid-nineteenth century (Wallace and Hoebel 1952:31-32), but by 1869 their numbers had dropped to only 2,578. The number of Comanche reached a low point in 1880, when the estimated population was only 1,399 (Wright 1951:119).

Presents promised the Comanche in 1846 had not appeared by the end of the decade. This did little to assuage the Native Americans during a period when United States-Comanche tensions were growing due to the forced removal of Eastern tribes and their relocation at the borders of Comanche territory. Furthermore, as years passed, the buffalo population dwindled, placing an added strain upon the traditional Comanche way of life (Wallace and Hoebel 1952:298-299) and probably encouraging raids on settlers. In 1853, the Comanche, Kiowa, and Kiowa-Apache signed a treaty at Fort Atkinson, Kansas, agreeing to cease raids along the Santa Fe Trail and in Texas and Mexico. As part of the agreement, the United States was to provide supplies and provisions to the Comanche. However, neither party abided by the terms of the treaty, and while raids upon the Santa Fe Trail ended for several years, attacks in Texas and Mexico continued (Hagan 1976:15-16; Nye 1969:18; Wallace and Hoebel 1952:300).

Texas created two reservations for Native Americans in 1855. Waco, Caddo, Anadarko, Hainai (Ioni), Tonkawa, and Tawakoni moved onto the reservation near Fort Belknap; and approximately half of the Comanche belonging to the Penateka (Honey-eater or Wasp) band settled on a reservation in present-day Throckmorton County, Texas (Hagan 1976:13-14; Wright 1951:118, 122). Meanwhile, in 1858, attacks by Texas Rangers and United States Cavalry upon Comanche not living on the reservation heightened Comanche anger at and distrust of Euro-Americans. Threats of raids on the reservations by Texans prompted the removal of the Native Americans from both Texas reservations to a northern location near the Washita River in 1859 (Hagan 1976:16-17; Wright 1951:123; Wallace and Hoebel 1952:302). The area to which the Native Americans were removed was part of a parcel of land referred to as the Leased District (Wright 1951:123). The Leased District was composed of land accepted by the Choctaw and Chickasaw in 1830 in exchange for their own lands east of the Mississippi. In 1855, the Choctaw and Chickasaw leased the portion of the Choctaw reservation located west of the 98th meridian back to the United States for the resettlement of other Native Americans (Wright 1951:33). The Choctaw and Chickasaw, none of whom are believed to have settled on land in the Leased District, later lost their rights to the land when they failed to support the United States in the Civil War.

CIVIL WAR TO THE TREATY OF MEDICINE LODGE (1861-1867)

Comanche raids continued during the years leading to the Civil War. In addition to acquiring cattle, horses, and captives, among other things, the Comanche hoped that raids would discourage Euro-American settlement in the area (Wallace and Hoebel 1952:267). During the Civil War, the Comanche did not ally themselves consistently with either the north or the south. Various bands agreed to peace treaties with the Union or Confederacy as circumstance made such treaties advantageous. The Comanche took advantage of wartime conditions by stepping up attacks and raids in Texas, New Mexico, Colorado, Kansas, and especially along the Santa Fe Trail (Hagan 1976:18-19; Nye 1969:32, 34-35; Wallace and Hoebel 1952:303-306; Wright 1951:124). In 1864, Kit Carson was sent to stop raids along the Santa Fe Trail that threatened to cut off the supply and communication lines of the United States Army in New Mexico. In November, Carson's force was met by Kiowa, Comanche, Kiowa-Apache, and Arapaho at Adobe Walls on the Canadian River. Carson did not succeed in intimidating the Native Americans into stopping their raids (Hagan 1962:306, 1976:20).

After the war, the United States decided to negotiate treaties with the Native Americans living on the plains rather than wage an expensive war against them (Hagan 1976:20-21). In the fall of 1865, following the end of the war, the United States and representatives of several, but not all, bands of the Comanche, along with Kiowa and Apache representatives, signed a peace treaty at the mouth of the Little Arkansas River near what is now Wichita, Kansas. The Native Americans agreed to live within an area of approximately 6,200 square miles specified by the treaty. This reservation included all of the panhandles of Texas and Oklahoma, as well as a large portion of southwestern Oklahoma. Although the treaty specified that the Comanche could still hunt in their traditional lands until they moved onto the reservation, it weakened Comanche claims to all of their traditional lands in New Mexico, Colorado, and Kansas, as well as portions of central, south, and west Texas and a comparatively small section of Oklahoma (Hagan 1976:21-23, 1976:20-21; Wallace and Hoebel 1952:307; Wright 1951:124). The treaty did not halt Euro-American-Comanche hostilities.

During 1866, the number and severity of Native American attacks on Euro-American settlers in and north of Texas increased. Government agents were sent to investigate the situation and propose a solution that would end the violence. The investigators recommended the negotiation of a peace treaty with the Native

Americans. In the hopes of avoiding a costly war, in 1867 Congress passed (Missouri) Senator Henderson's bill to give \$150,000 for negotiations to settle Plains Indians on reservations. Once on the reservations, the Native Americans were supposed to turn to farming and stock raising as their major means of subsistence (Hagan 1976:6-7). As a result of the new bill, officials of the United States government met with the Kiowa, Kiowa-Apache, Comanche, Cheyenne, and Arapaho near Medicine Lodge, in Barber County, Kansas, in October 1867 (Hagan 1976:27-32, 38-39; Wallace and Hoebel 1952:308-309). The Comanche and Kiowa signed the Treaty of Medicine Lodge on October 1, 1867; however, two large Comanche bands, the Meat-eaters and Antelopes, did not sign the treaty. Under the terms of the treaty, the Comanche and Kiowa agreed to live on a 5,546-square-mile reservation on land that encompassed the present-day Oklahoma counties of Comanche, Kiowa, Cotton, and Tilman, and parts of Grady, Stephens, and Jefferson (Wallace and Hoebel 1952:310). It also specified that the Kiowa and Comanche would "relinquish all right to occupy permanently the territory outside of their reservation, as herein defined, but they yet reserve the right to hunt on any lands south of the Arkansas (River) so long as the buffalo may range thereon in such numbers as to justify the chase. . . ." (Aldrich and Peterson 1970:211-212). Another provision of the treaty specified that the reservation had to contain at least 160 acres per Native American. The Treaty of Medicine Lodge also declared an end to war between the United States and the Kiowa and Comanche. The Native Americans agreed to allow the construction of railroads through the reservation, to cease capturing Euro-American women and children and scalping Euro-American men, to halt attacks upon Euro-Americans, and to stop raiding for cattle, mules, and other animals. The treaty made provisions for the construction of an agency on the reservation, and for the compulsory education of children between the ages of six and sixteen. It also contained an article intended to encourage farming by the Kiowa and Comanche by giving up to 320 acres of land to any Native American head of household who wished to begin farming (Aldrich and Peterson 1970:210-213). The United States agreed to provide "annuity goods" to the Comanche and Kiowa for 30 years (Wallace and Hoebel 1952:309).

TREATY OF MEDICINE LODGE TO THE SURRENDER OF THE LAST NON-RESERVATION COMANCHE (1867-1875)

At first, less than half of all Comanche remained on the reservation that was in the vicinity of the new agency built near Fort Sill in 1869, and raids continued (Hagan 1976:45; Wallace and Hoebel 1952:312). Others stayed away, or came to the agency only when rations were issued. The quality, quantity, and regularity of distribution of rations remained a constant problem throughout the reservation years (Hagan 1976:62-65). The poor quality and small amounts of rations made it necessary, from the beginning of life on the reservation, for the Comanche to leave the vicinity of the agency and even the reservation in order to hunt for their subsistence. Later, as the number of buffalo dwindled and the rations remained insufficient, the Comanche raided cattle ranches for a supply of meat on which they could exist.

In 1868, the United States pursued a dual policy of reward and punishment toward the Native Americans. The Army under General Sheridan was sent out to punish hostile Native Americans with military force. General Hazen, who was in charge of the "civilization" of the Native Americans, was expected to provide a safe haven for friendly Native Americans and to support them using monies provided to him for that purpose (Hagan 1976:52), despite the fact that it was difficult to separate "friendly" from "hostile" Native Americans. The problematic two-pronged policy was seen as duplicitous by Central Superintendent Thomas Murphy and at least two Indian Agents. The policy resulted in the November 1868 massacre of a Cheyenne encampment on the Washita River by Lieutenant Colonel George Armstrong Custer. Although some Cheyenne in the encampment had participated in raids against settlers in Kansas, Black Kettle, leader

of the encampment, had returned recently from a meeting with Hazen where he had attempted to make peace with the General (Hagan 1976:54-55; Nye 1969:57-70). Shortly thereafter, on December 25, 1868, Sheridan's forces encountered a Comanche Camp at Soldier Springs, killing 25 Native Americans and burning their camp (Hagan 1976:54-55).

A change of policy came about after Ulysses S. Grant's inauguration in March of 1869 (Nye 1969:99). From 1869 to 1874, the United States Congress and President Grant pursued a "peace policy" toward Native Americans, hiring pacifist Quakers as Indian Agents and foregoing the use of the military to force Native Americans onto reservations. Two million dollars were appropriated to promote peace with the Native Americans and a Board of Indian Commissioners was created to supervise distribution of the money. Historian William Hagan (1976:57-58) asserted that while concern with human rights may have been a motivating factor behind the adoption of the peace police, the main reason for its adoption was the desire of Congress to avoid the expensive of war. The peace policy did nothing to encourage the Comanche to move onto the reservation, where conditions remained poor (Wallace and Hoebel 1952:314-316). Although attacks and raids upon settlers and travelers were usually blamed on the non-reservation Comanche during these years, undoubtedly those on the reservation were responsible for at least some of the attacks.

The raids continued and calls for retribution went on as usual until the Warren wagon-train massacre of May 18, 1871, when Satana, Big Tree, Satank, and 100 Kiowa and Comanche warriors ambushed a wagon train west of Fort Richardson, killing seven Euro-Americans. Satana admitted his guilt to the Kiowa Indian Agent at Fort Sill, naming Satank, Eagle Heart, Big Bow, and Fast Bear as accomplices in the raid. Another Native American informed the agent that Big Tree had taken part in the attack. Satana, Satank, and Big Tree were arrested, and arrangements were made to take them to Texas for trial. Satank was shot and killed when he started a struggle with a guard on the wagon transporting him from Fort Sill. Big Tree and Satana were sentenced to death by a Texas jury, but the sentence was commuted to life imprisonment and they were incarcerated in Texas until their release in 1873. Later, Satana was jailed for violating his parole, and killed himself after four years in prison (Hagan 1976:76, 112-113; Nye 1969:136-147, 255). Despite the arrests, raids continued in 1871 and 1872.

Due to the failure of the peace policy to end Comanche raids, the military was sent from Fort Griffin on a punitive expedition against the non-reservation Native Americans in 1872. United States forces, led by Colonel R. S. Mackenzie, attacked the Antelope Band of Comanche near Blanco Canyon. This expedition succeeded in persuading even the Antelope band to camp near Fort Sill during the winter of 1872-1873. Although the peace policy was still the official policy of the government at this time, Quaker Agent Lawrie Tatum had become convinced that force was necessary to get the Comanche to live on the reservation. As a result of his failure to take a stand against Mackenzie's punitive expedition, Tatum was replaced by another Quaker agent in 1873 (Nye 1969:161-163; Wallace and Hoebel 1952:317-318).

Meanwhile, conditions on the reservation worsened. In 1874, trains carrying rations destined for the agency encountered difficulty due to inclement weather. Half rations were issued that year, and reportedly the Comanche were forced to eat their horses and mules (Wallace and Hoebel 1952:318). In June 1874, the Comanche attempted to defend their lands against Euro-American buffalo hunters at Adobe Walls. Approximately 300 Comanche, Kiowa, and Cheyenne attacked the hunters living at Adobe Walls who were slaughtering buffalo in violation of the Treaty of Medicine Lodge (Hagan 1962:71; Wallace and Hoebel 1952:65). The attack was made at the encouragement of an Antelope band medicine man, Eschiti (Coyote Droppings/Wolf's Rear End) (Hagan 1993:140). Eschiti claimed that he and anyone who followed him would be immune to bullets. Quanah Parker helped organize the attack and participated in the battle. Because the buffalo hunters were outside investigating a problem with a roof beam in their dwelling when the attack commenced, the Native Americans lost the element of surprise that might have made the early

morning attack successful. At least 12 Native Americans died in the unsuccessful assault (Hagan 1976:107-108, 1993:4, 12-13). Although the raid caused a brief hiatus in the extermination of buffalo by Euro-American hunters in the immediate area, the poachers soon shifted the focus of their activity southward again, and by 1875 were once more methodically killing buffalo in the area. It was apparent by the 1870s that if the slaughter continued, there soon would be no buffalo left. Despite a measure of public concern, labeled sentimental by its opponents, the killing proceeded (Hagan 1976:106; Wallace and Hoebel 1952:65-66). Annihilation of the buffalo was supported by a large segment of the Euro-American population, including prominent individuals like General P. H. Sheridan, who correctly asserted that one sure way to defeat the Comanche was to continue "destroying the Indians' commissary" (Wallace and Hoebel 1952:66).

The peace policy ended in 1874 (Wallace and Hoebel 1952:326). In response to Adobe Walls and subsequent incidents, Sheridan and Sherman made preparations to send troops into the field against the Native Americans. By August 3, 1874, all friendly Native Americans were to be at their agencies and remain there for daily roll call. Native Americans not there were "subject to attack anywhere they were found" (Hagan 1976:109). A skirmish lasting several days began on August 22 between the Native Americans and the Army at the Wichita Agency (Hagan 1976:111). This agency had been established north of present-day Anadarko in 1870 to serve the Wichita and affiliated bands. The Kiowa and Comanche Agency and the Wichita Agency remained separate until 1878-1879, when they were combined at a new site that was named Anadarko (Crouch 1978:11; Nye 1969:103). The August 22, 1874, skirmish involved Kiowa and Comanche who had gone to the Wichita Agency rather than their own agency near Fort Sill hoping for protection from the army, and because they knew that at Fort Sill they would have to surrender their weapons. Six civilians and approximately 10 Native Americans were killed; four soldiers were wounded (Hagan 1976:111). As a result of the skirmish, approximately half the Comanche, Kiowa, and Kiowa-Apache were camped at Fort Sill one month later. The other half of the population escaped to the west (Nye 1969:210).

The Army attacked camps of the remaining non-reservation Native Americans during the fall and winter of 1874, and while loss of life was low, much property was destroyed (Wallace and Hoebel 1952:327). An attack by Mackenzie in Palo Duro Canyon, Texas, was particularly devastating. The Colonel captured and shot approximately 1,000 ponies and destroyed the camp and all the "lodges, food, and equipment" there (Hagan 1976:112). By the end of winter, 20 Native Americans had been captured and 10 more had been killed. Following these attacks, most of the Comanche and Kiowa surrendered (Nye 1969:228). Many surrendered at Fort Sill, where their "horses, mules, and weapons . . . camp kettles, saddles, buffalo robes, and other camp gear" were confiscated (Nye 1969:229). Some were imprisoned at Fort Sill and later sent to Fort Marion in Florida (Hagan 1976:112-114; Nye 1969:229-231).

In May 1875, the last of the Quahada (Antelope) band of Comanche agreed to surrender. This band included Quanah Parker, future principal chief of the Comanche, who was influential in the band and had argued in favor of surrender. However, the medicine man Eschiti, generally thought to have been the acknowledged leader of the band at that time, was credited by one Anglo witness as the one who persuaded the band to go to Fort Sill. The final surrender of the Antelope band occurred June 2, 1875, near Signal Mountain (Hagan 1976:117, 119; Wallace and Hoebel 1952:327-328; Wright 1951:126).

LIFE ON THE RESERVATION (1875-1900)

Reservation life remained difficult for the Comanche. The government implicitly and sometimes explicitly had sanctioned the extermination of the buffalo as a means of forcing the Comanche and other plains groups onto reservations. Extermination of the buffalo was nearly complete by 1879, the year of the last organized Comanche buffalo hunt (Wallace and Hoebel 1952:63-66; Wright 1951:125). However, having succeeded in eliminating the traditional Comanche source of food and forcing them into dependence upon the United States government for subsistence, Congress was reluctant to appropriate sufficient money to support the Comanche (Hagan 1974:99, 1976:138). As a result of low funding, as well as inefficiency and corruption within the ration distribution system, the rations received by the Comanche were consistently scarce and of low quality. The scarcity of food was a major motivating factor in the continuation of raids even after 1875 (Hagan 1976:120-122). The last raid took place in 1879 (Wallace and Hoebel 1952:328).

During the 25 years between the surrender of the last band in 1875 and allotment in 1900, there was an intensified effort on the part of various groups of Euro-Americans to destroy Native American customs and lifeways. Systematically, government officials set out to destroy band organization (Hagan 1976:154-155), turn the Comanche into farmers or ranchers rather than nomadic hunters, eradicate Comanche religious practices, and eliminate certain other aspects of Comanche life that they did not care for, such as polygamy and the practice of living in tepees rather than houses (Hagan 1962:75-76, 132-133; Wallace and Hoebel 1952:43). The prevailing feeling in 1889 was:

The logic of events demands the absorption of the Indians into our national life, not as Indians, but as American citizens. . . . The Indians must conform to the 'white man's ways,' peaceably if they will, forcibly if they must. They must adjust themselves to their environment, and conform their mode of living substantially to our civilization. This civilization may not be the best possible, but it is the best the Indians can get. They can not escape it, and must either conform to it or be crushed by it. . . . The tribal relations should be broken up, socialism destroyed, and the family and the autonomy of the individual substituted [Myers 1889:3-4].

The prevailing view in Congress was that the Comanche and other Native American groups immediately should become farmers in order to support themselves. Attempts to turn the Comanche into farmers were unsuccessful, due at least in part to a lack of desire by the Native Americans to become farmers, as well as the poor quality of the reservation land and bad weather (Hagan 1976:126-128). Officials also tried supplying the Native Americans with cattle and sheep in the attempt to turn them into ranchers. These early efforts to promote ranching among the Native Americans also failed. The Comanche did not want to become shepherds, and the ration situation had become so bad that the Native Americans were forced to kill and eat many of the animals intended to start their cattle herds (Hagan 1974:80, 1976:128, 138).

The changes forced upon the Comanche in the span of one generation were so extreme that in the preface to a study of Comanche law-ways, E. A. Hoebel (1940:7) declared that the culture elderly Comanche described to him in 1933 had been "defunct for fifty years and more." Wallace and Hoebel (1969:328-329) explained elsewhere that the enormity of the changes expected of the Comanche precluded "simple adjustment" to the new circumstances. Certainly available biographical data about Quanah Parker support their assertion that no simple adjustment to the new way of life forced upon the Comanche was possible.

Quanah Parker was the son of the Comanche war chief Peta Nocona of the Quahada band, and Cynthia Ann Parker, a Euro-American woman captured at the age of nine during a Comanche raid on Fort Parker in the Republic of Texas in 1836 (Hagan 1962:71, 1993:4-7). Parker grew up as a Comanche. He was born in approximately 1852, and was orphaned before he became an adult. Parker lost his mother in 1861, when she was recaptured by Texas Rangers, and it is believed that he was eleven when his father died (Hagan 1993:6-7). Before surrendering at Fort Sill in 1875, Quanah Parker had become a well-known warrior, participating in the Battle of Adobe Walls in 1874 and most likely in other raids as well. Although he had achieved a level of influence among his own band by 1875, Parker was not the acknowledged leader of the Antelope band at that time. His rise to power began in earnest following the resettlement of the Comanche onto the Fort Sill reservation (Hagan 1976:10).

Quanah Parker was a complex man who lived through an era of enormous change. What follows is a summary of the present state of knowledge about Parker and his place in Comanche history.² Most recently, Parker has been analyzed by his biographer, historian W. Hagan, as a person who took on the role of middleman or broker between Euro-American and Comanche culture. Hagan (1976:154-156, 1993:126-127) has asserted that Parker's ability to adopt this role, along with his natural leadership skills and the attention his mixed parentage brought him from reservation officials, were major factors in his rise to power after 1875. In that year he was made one of several band chiefs by the agent and Colonel Mackenzie (Hagan 1976:154-156). According to Hagan (1993:126-127), Parker attempted both to adapt to life in a Euro-American world and remain a traditional Comanche. The Comanche leader wore his hair long despite pressure to cut it. He also used peyote and defended its use by Native Americans against those who wished to stop the practice (Hagan 1993:91, 116-118, 127). Parker practiced polygamy, although it cost him a judgeship on the Court of Indian Offenses and led the government to refuse to assist in the construction of his home (Hagan 1976:181, 1993:43-44). On the other hand, Parker was far from unwilling to learn new skills and adapt in other ways to the new environment. He became an astute businessman and negotiator (Hagan 1993:97). By the mid-1880s, he had built a herd of cattle large enough to enable him to sell 40 animals to the United States for use as part of the beef ration (Hagan 1976:144). Parker maintained generally friendly relations with Euro-American officials, including both Indian Service personnel and Army officers, two groups who often had trouble dealing with each other (Hagan 1962:71, 76).

Eventually, Quanah Parker achieved power, affluence, and fame both among the Comanche and Euro-Americans. However, he did not achieve either fame, relative wealth, influence, or renown without controversy. Parker's dealings with Euro-American cattlemen during the reservation era were particularly controversial, and his quick rise to power caused problems with other Comanche leaders. Some alleged that he had been "bought by the cattlemen" (Hagan 1976:156). Quanah Parker earned the respect of many if not most of the Comanche people, but his leadership was not uncontested, nor was he looked upon by all as a model leader (Hagan 1993:48, 63; Hoebel 1940:25; Wallace and Hoebel 1952:267). For example, in the 1930s, Comanche informants said that Parker had a reputation for favoring himself and his relatives in the division of the spoils acquired during a raid, that this was a sign of "bad medicine," and that because of his reputation some warriors would not accompany Parker on raids (Hoebel 1940:25; Wallace and Hoebel 1952:267). Some Comanche said that Parker was "really a white man and is getting rich" (Hagan 1993:95).

² For more detailed discussion of and information about Quanah Parker, it is suggested that the reader refer to the references cited section of this document, particularly to W. T. Hagan's 1993 book, *Quanah Parker, Comanche Chief*.

During the 1870s, interest in reservation grasslands increased. The reservation was located just east of the Chisholm Trail, and another major trail, known as the Western Trail, passed through the western part of the reservation (Hagan 1993:28). Cattle driven across the reservation often were allowed to linger in order to take advantage of the rich grasslands. Finally, a specific trail and distance the cattle had to travel per day were established to combat this practice. Euro-American cattlemen also wanted to graze their herds on reservation land. Although such grazing was illegal, ranchers quickly found ways around the law. Herds were situated purposely just south of the Red River or elsewhere close to the borders of the reservation, and allowed to move unobtrusively onto reservation lands. The large reservation was difficult to police, and the ranchers got away with such behavior much more often than they were caught. Some men married Native American women and moved their herds onto the land under the wife's name (Hagan 1974:81-82; Wallace and Hoebel 1952:347). Suppliers of cattle to Fort Sill sometimes grazed more cattle than necessary on the land (Hagan 1976:150).

The cattlemen lobbied for the legalization of grazing leases for reservation lands. At first, most Kiowa, Comanche, and Kiowa-Apache, including Quanah Parker, were opposed to leasing. Some of the prominent leaders, including Parker, Eschiti, and Permamsu (Afraid of Hair/Comanche Jack) soon changed their stance on the grazing issue. These leaders were given gifts by the cattlemen, including money, cattle, jewelry, and trips (Hagan 1974:92, 1976:151, 176, 1993:33, 38-39, 141), which probably influenced their change of heart. Pro-leasing and anti-leasing factions formed, furthering the deterioration of traditional band alliances. Prominent in the pro-leasing faction were Quanah, Eschiti, and Permamsu, all influential band leaders from the southern part of the reservation. This section of the reservation was of the greatest interest to the cattlemen, who focused on the inhabitants of this area in their attempts to gain Native American support for grazing leases. The Kiowa, who lived on the northern part of the reservation, tended to be opposed to leasing along with several prominent older Comanche band leaders, such as Tabanaka and White Wolf, who also were against the legalization of leasing (Hagan 1974:85; Wallace and Hoebel 1952:346-348).

Leaders of the pro-leasing faction took lobbying trips to Washington, probably paid for by the cattlemen. Meetings were held to try to determine the general opinion of the Kiowa and Comanche, and government officials debated the desirability of legalizing grazing. In the meantime, neither the officials at Fort Sill nor the Indian Police could keep the reservation free of the ranchers' cattle, and most Native Americans were not profiting from the illegal use of their land. During the winter of 1882, for example, an estimated 50,000 cattle were grazing illegally on reservation land. Rations were extremely short, and the Indian Agent finally agreed to grant temporary leases to the cattle owners in exchange for animals to be used to supplement the Native Americans' rations (Hagan 1974:82-83).

By 1885, debate over the legalization of leasing had reached the level of the Secretary of the Interior and the Attorney General. The Attorney General maintained that a treaty or an act of Congress would be necessary to make leasing legal, but as matters stood, the cattlemen could not be prosecuted if they had an agreement approved by the Native Americans. However, their cattle could be removed from the reservation. In 1885, the first payment was made on such a lease, but most Kiowa and some Comanche refused to accept the money from the cattlemen. Many believed that if they accepted the money, their land could be taken away (Hagan 1976:152-154; Wallace and Hoebel 1952:348). It was not until 1891 that Congress declared it legal to lease land on Native American reservations for grazing purposes. Grazing leases were to be for a period of five years or less (Hagan 1974:91). In 1892, the Kiowa and Comanche sent a delegation to Washington, D.C., to discuss leasing reservation grasslands. As a result, it was decided that one-year leases could be granted for grazing on Kiowa and Comanche lands. Six leases of this type were granted that year for a combined total of 250,580 acres. By 1893, over 1,000,000 acres of land were leased to the cattlemen at six cents an acre (Wallace and Hoebel 1952:348-349). Prominent

Euro-American lessees included E. C. Suggs, C. T. Herring, S. B. Burnett, D. W. Waggoner, and J. P. Addington (Hagan 1974:91). According to Hagan (1974:99), leases benefited the cattlemen but did little for the Comanche, ending their relative isolation from Euro-Americans and corrupting Comanche leaders, including Parker. In return, the Comanche received only "grass money," which often was spent rapidly and seldom to the long-term benefit of the Comanche.

A Native American Police Force was created for the reservation in 1878 (Hagan 1976:148). These police were "to ride over the country and keep watch for thieves and trespassers, to report any troubles that might arise among the Indians of the reservation, and to keep watch over the Indians' cattle and horses" (Wallace and Hoebel 1952:340). Eight years later, in 1886, a Native American court was established, after Quanah Parker and several other Comanche approached the Indian Agent requesting that a Native American court be set up so that offenders would not have to be transported to Fort Smith for trial (Hagan 1962:72-73). The tribunal was known as the Court of Indian Offenses. Quanah Parker was named its presiding judge. The other two earliest judges were Lone Wolf (Kiowa) and Jim Tehuacana (Wichita) (Wallace and Hoebel 1952:342). The judges of the Court of Indian Offenses, whose pay was low but prestige high, had jurisdiction over "dances, plural marriages, medicine men, theft, destruction of property, extra-legal relations with Indian women, and vagrancy" (Hagan 1962:74). At least some of the "Indian offenses" listed above are aspects of Native American culture that the Euro-Americans who set up the court hoped to eliminate (Hagan 1962:73-74). However, the Court of Indian Offenses did not suppress Native American practices. On the contrary, its judges often settled disputes on the reservation according to Native American traditions rather than Euro-American laws. Parker acted as a judge from the founding of the court in 1886 until 1898, when he and fellow judge Apiatan were removed from the bench because of their practice of polygamy (Hagan 1962:74, 78).

Quanah Parker's famous Star House (see frontispiece), "a beacon to the curious" (Hagan 1993:127), was built some time between 1882 and 1892 (Hagan 1993:43-44). The author of a 1957 Fort Sill memo maintained that the home was constructed in 1889 (Fort Sill Museum 1957:n.pg.). Parker first bought lumber and let a contract for the house, which was to be two stories tall and have ten rooms. Then, he tried to obtain assistance from the government in building the house. Parker's numerous requests for help, filed over two years, were refused because he continued to practice polygamy (Hagan 1976:181, 1993:43-44). After the government declined to help him build his house, Quanah Parker obtained the assistance of cattleman and banker Samuel Burk Burnett, and possibly other cattlemen as well (Fort Sill Museum 1957:n.pg.; Hagan 1976:181). Between the completion of construction and Parker's death in 1911, the home was renovated extensively (Hagan 1993:124, 126). One author asserted that Star House originally was modeled after the General Sherman House at Fort Sill, but that "the different life-style of the Indians soon prompted several changes" (Fort Sill Museum 1975:18). According to one source:

The narrow front porch was replaced by soaring two-level verandas on three sides. A new dining room was constructed as a wing where guests could be entertained without their having access to the living quarters. The original large living room was partitioned and became two bedrooms, and Quanah appropriated the former parlor for his own chamber.

The old dining room became the living room and the back porch was now the front entrance. The former front door was replaced with windows and the entrance hall became a utility room and stair well [Fort Sill Museum 1975:18].

According to Hagan, a government carpenter built the veranda for Parker (Hagan 1976:181). A 1957 Fort Sill memo describes the veranda columns and picket fence as hand hewn, and explains that lumber for the

building came from Vernon, Texas (Fort Sill Museum 1957:n.pg.). Stars were painted on the roof of the house, and oral tradition relates that the stars are the origin of the name "Star House." These stars were not an original feature of the home. They do not appear in an 1893 photograph, but do appear in a picture taken of the home in 1911 (Hagan 1993:124, 126). Parker was known for his hospitality, and entertained several well-known guests at Star House, including President Theodore Roosevelt (Fort Sill Museum 1957:n.pg.).

After Parker's death in 1911, one of his two remaining wives, To-pay, inherited the use of the house and proceeds from the rental of associated farmland as long as she did not remarry (Hagan 1993:122). In 1956, when Quanah Parker's allotment was sold to the government (Comanche County *Deed Books* 444:598-599), Parker's descendants still owned the home. Parker's granddaughter, Anona Birdsong, owned his allotment at the time of government acquisition, and it seems likely that she also owned Star House (Comanche County *Deed Books* 444:598-599, 446:116-117). However, it is also possible that her mother, Neda Parker Birdsong, owned the house in 1956. Neda Parker Birdsong (also spelled Ne-dah, and sometimes referred to as Laura) (Anonymous n.d.:1:39), was the daughter of Quanah Parker and A-er-wuth-takum (Hagan 1993:111). Contemporary newspaper reports indicate that she lived in Star House until 1956 (Fort Sill Museum 1957:n.pg.). Neda Parker Birdsong attempted to sell the home to Fort Sill in 1957, explaining to a Fort Sill official that she had temporarily deeded the house to her daughter at the beginning of the year (Fort Sill Museum 1957:n.pg.). However, Neda Parker Birdsong had a history of misunderstanding the process of deeding property (Comanche County *Deed Books* 446:116, 295:194, 446:116-117) and it seems possible that she also failed to understand it on this occasion, particularly since Anona was negotiating with another potential buyer at the same time her mother attempted to sell the house to Fort Sill (Fort Sill Museum 1957:n.pg.). A detailed description of the previous mix-up over the ownership of Quanah Parker's allotment and Neda Parker Birdsong's part in the confusion is included in Chapter 6 of this report.

Neda Parker Birdsong moved Star House approximately six miles from its original location to the town of Cache early in 1957 when the government acquired Quanah Parker's allotment in 1956. The house was moved in three separate sections, the kitchen, the main house, and the porch. It was transported for a fee of \$2,000 by a contractor named Turnbull from Porter Hill (Fort Sill Museum 1957:n.pg.). Later, the house was taken to its present location at H. W. Woesner's Eagle Park Amusement Park north of Cache (Fort Sill Museum 1957:1, 1970:n.pg.). The house became a National Register historic site in 1973 (Fort Sill Museum 1973:n.pg.).

Quanah Parker had a total of at least seven and possibly eight wives throughout his lifetime. His first wife, a Mescalero Apache woman named To-ha-yea, was no longer with him in 1875 (Hagan 1993:22-24). He next married Weck-e-ah (Hunting For Something), whose daughter, Nahmukuh, later would marry Euro-American Emmet Cox. Cho-ny (Going With The Wind) became Quanah Parker's third wife; Cho-ny and Quanah Parker had four children together. Parker's fourth wife, A-er-wuth-takum (She Fell With A Wound), also had four children with Quanah. At least two of these were sons, one named Len and the other Tom. Her daughter, Neda, has already been discussed as a later owner of Star House. Neda also owned Parker's allotment sometime between 1911 and 1922 (Comanche County *Deed Books* 446:116). Weck-e-ah, Cho-ny, and A-er-wuth-takum were the three wives who moved onto the reservation with Quanah in 1875 (Hagan 1993:23-24, 110). By 1882, Parker had five wives; by 1890, six; by 1894, seven (Hagan 1993:43-47). A-er-wuth-takum and another previous wife, Co-by, were divorced from Parker by 1898 and at that date, in addition to Weck-e-ah, Cho-ny, and A-er-wuth-takum, Parker's wives included Ma-cheet-to-wooky (Pushing Ahead), To-nar-cy (Straight), and To-pay (Something Fell) (Hagan 1993:48-49, 139-141).

Quannah Parker had 24 children, 16 of whom survived their father (Hagan 1993:49). Some of his children attended Carlisle Indian School in Carlisle, Pennsylvania; others went to Fort Sill Indian School. Parker sent at least one of his sons to public school in Cache; at that time, Parker's allotment was not part of a public school district. After the prejudices of other parents forced him to withdraw the child from the school, Parker approached the Comanche County Superintendent of Schools about creating a public school district that would include his allotment. Parker founded a school on his allotment sometime between 1900 and 1911 (Hagan 1993:110-111).

ALLOTMENT AND THE LOTTERY (1900-1901)

During the latter half of the nineteenth century, pressure on the United States government to open land in Indian Territory for Euro-American settlement increased. In 1887, Congress passed the General Allotment Act, also called the Dawes Severalty Act (Hagan 1988:61). However, this act did not apply to the Kiowa-Comanche or Wichita-Apache reservations, which were the last to be allotted and opened to Euro-American settlement. In 1889, a special act to cover the allotment of the Kiowa-Comanche reservation was passed by Congress. This act "authorized creation of a government commission to treat directly with the reservation Indians for the purchase of their surplus lands and with the Cherokee Nation for the purchase of the Cherokee Outlet" (Wright 1951:19). Although many wanted to open the land to Euro-American settlement as quickly as possible, not everyone was in favor of allotment and land opening. Those against the move included the Native Americans and Indian Agents. In his 1889 report to the Commissioner of Indian Affairs, Agent W. D. Myers at the Kiowa, Comanche, and Wichita Agency reported that the Native Americans "oppose to a man the allotment of their land in severalty, claiming they are not yet ready for the change, and I am firmly impressed with the belief that the time has not yet come when these people should be forced to accept this measure" (Myers 1889:192).

Despite opposition to allotment, in October 1892 the Jerome Commission visited the reservation and obtained an agreement with the Kiowa, Comanche, and Kiowa-Apache for the allotment of their lands in severalty. The Jerome Agreement stated that every Native American would be allotted 160 acres, to be held in trust for them by the United States government for 25 years. The remainder of the reservation lands, except for three pasture areas to be held collectively by the Native Americans, would be opened to Euro-American settlers (Dale and Rader 1930:540; Hagan 1974:92; Wallace and Hoebel 1952:349-350). In return for their land, the Native Americans would receive \$2,000,000 to be paid in \$500,000 increments at the discretion of the Secretary of the Interior. While still in the treasury, the money would earn five percent interest, which would be paid to the Native Americans each year (Wallace and Hoebel 1952:350). Many of the Native Americans were angry about the Jerome Agreement; not all Kiowa and Comanche had been at the meeting with the Jerome Commission, and therefore many were of the opinion that the Jerome Agreement was invalid. Particular ire was reserved for Satank's son, Joshua Given (sometimes spelled Givens) (Hagan 1993:140; Nye 1969:353). Many Kiowa and Comanche alleged that Given had translated incorrectly at the meeting (Wallace and Hoebel 1952:350).

A 10-year delay occurred between the visit of the Jerome Commission and the ratification of the agreement by Congress. The delay angered those eager for the land to be opened to Euro-American settlement. These people included Euro-American would-be settlers and business owners from nearby towns who hoped to profit from the new settlers. The Rock Island Railroad sent lobbyists to Washington to argue for ratification of the Jerome Agreement (Hagan 1993:93-94). The railroad "had lines on and near the reservation and a major stake in having the area opened to white settlement" (Hagan 1993:97). The long delay before ratification was attributed in part to intervention by powerful cattlemen, who did not wish to

see their profitable grazing leases end (Hagan 1974:92). The Interior Department had been concerned that the profits from grazing leases would increase Native American resistance to allotment (Hagan 1974:89), and it is likely that this did occur. Quanah Parker and other prominent Native American leaders lobbied against ratification of the Jerome Agreement (Wallace and Hoebel 1952:350-351). Indian Agents continued to oppose ratification of the agreement by Congress. In an 1899 letter to the Commissioner of Indian Affairs, Kiowa, Comanche, and Wichita Indian Agent James F. Randlett argued that there already was enough land open and awaiting settlement, and that the land on the reservation was not good farmland (Randlett 1899:261). In that same year, Randlett and Special Agent Pray submitted a report similar to the one presented by Agent Myers in 1889. In this report, Pray and Randlett asserted that the Native Americans were not prepared to compete with Anglo-American homesteaders. They also maintained that each Native American family would need 1,000 acres of land rather than the 160 acres promised under the terms of the Jerome Agreement in order to be self-sufficient (Hagan 1993:97). The arguments of Pray and Randlett went unheeded.

Another complication in the affairs of the Kiowa, Comanche, and Kiowa-Apache was the claim of the Choctaw and Chickasaw to the Leased District, which the United States government claimed had been forfeited by the Choctaw and Chickasaw when they chose to side with the Confederacy during the Civil War. A group known as the Indian Rights Association successfully lobbied to ensure an equitable settlement for the Kiowa, Kiowa-Apache, Comanche, and Wichita even if the Choctaw and Chickasaw obtained compensation for this land in court. However, the Choctaw and Chickasaw lost a parallel case in 1900, and compensation for Comanche lands was not sought (Hagan 1993:97).

In 1895, the Indian Agent was ordered to have reservation lands surveyed and five years later, on June 6, 1900, the Jerome Agreement passed Congress; allotment took place between 1900 and 1901 (Wallace and Hoebel 1952:351). As specified by the Jerome Agreement, each Native American selected a 160-acre allotment. Parents chose allotments for individuals under the age of 18, and the Commissioner of Indian Affairs or his appointee was given the task of selecting allotments for orphans and anyone who could not or would not select an area on their own (Dale and Rader 1930:541-542). The allotted area was recorded and the Native American received a patent for it (Wallace and Hoebel 1952:351). Indian Agent Randlett reported in 1900 that many chose land where they had already settled and sometimes had improved. He added that "during the last year over 100 houses have been constructed for the Indians . . . [and] provision has been made for the construction of 50 additional houses for dwellings for the Indians, to be constructed this fall" (Randlett 1900:332). At the time of allotment, 18 Euro-Americans who were married to Native Americans obtained land and all other benefits accorded Native Americans under the Jerome Agreement. One of these was Horace Jones, whose allotment falls within the project area and is the location of site 34Cm-451. Five "friends of said Indians, who have rendered to said Indians valuable services" also received land, but not the other privileges of allottees (Dale and Rader 1930:543). Apparently, allotment was carried out on a first come, first serve basis (Wallace and Hoebel 1952:341-342). When more than one person claimed the same area, the conflict was settled in the Court of Indian Offenses. At least one such case was recounted by the Comanche Quásia (Eagle Tail Feather) to a member of the Santa Fé Laboratory of Anthropology in 1933 (Wallace and Hoebel 1952:ix). According to Quásia, Quanah Parker used traditional Comanche law rather than United States law to decide the case, ruling that the disputed allotment should go to the man who was reputed to be the braver warrior (Hoebel 1940:55; Wallace and Hoebel 1952:341-342).

The Apache prisoners of war who had been interned on the Fort Sill Military Reservation since 1894 did not receive allotments until they were freed in 1913. Most detainees went to the Mescalero Reservation in New Mexico at that time. However, 85 former Apache prisoners of war stayed in Oklahoma after 1913,

receiving allotments of land and cattle from the government (Wallace and Hoebel 1952:352). Presently, no allotments owned by Apache are known to have existed within the current project area.

In 1901, the reservation land not allotted to Native Americans was opened to Euro-American homesteaders by lottery. In preparation for the opening, the Commissioner of Indian Affairs abolished the Court of Indian Offenses on July 1, 1901. Cattlemen were ordered to remove fences and cattle prior to July 10. Registration for the lottery took place from July 10 to July 26, 1901, at El Reno and near Fort Sill, Oklahoma Territory. In order to register, a person first had to prove that he or she was over the age of 21 or the head of a household. Next, the registrant filled out a card describing himself or herself, so that he or she could be identified later by officials as the same person who registered. The person registering then obtained a receipt that allowed him or her to look at the land and to choose a 160-acre potential homestead (Estill 1931:368).

So many people came to register that in order to reduce the chaos, officials organized would-be homesteaders into companies of 100 people, each with a captain. Companies were numbered and were registered in numerical order. Once it became clear how many companies could register per day, people knew approximately when their company would register, thus reducing crowding at the registration places (Aldrich and Peterson 1970:302-303). Despite the efforts of soldiers to preserve order, a Mexican man reportedly was killed during registration at Fort Sill for trying to push his way into line (Estill 1931:371). According to author Emma Estill, approximately 10,000 people camped in Cache Creek valley during registration, and by the last day, a total of 165,000 people had registered (Estill 1931:370, 372).

The lottery itself was held at El Reno on July 29, and was attended by more than 30,000 people. Town lots were auctioned on August 6 (Wallace and Hoebel 1952:351-352). Comanche County was created (Department of the Interior 1902:618), and Anadarko, Hobart, and Lawton were all laid out at the time of the lottery (Wallace and Hoebel 1952:351). The order in which names had been drawn in the lottery was the order in which people were to register their claims. Claims were to be filed beginning August 6, with 125 people filing per day (Estill 1931:377). Entries in the Comanche County *Deed Books* indicate that homesteaders paid the United States \$1.25 per acre, and had to remain on the land for one year before obtaining their patent (Comanche County *Deed Books* 6:383, 11:67).

Soon after the lottery and opening of the reservation to Euro-American settlers, Euro-Americans began pressing to have the reserved pasture lands opened up to settlement (Wallace and Hoebel 1952:352). In June 1906, the opening of this land to settlement was authorized by Congress, and the land was sold by sealed bids after Native Americans born after June 6, 1901 were given 160-acre allotments (Hagan 1974:98; Wallace and Hoebel 1952:351-352). On November 16, 1907, Oklahoma became the forty-sixth state.

CRATERVILLE (CA. 1901-1956)

After allotment and the land opening in 1901, several towns in the project area were registered with the Comanche County Clerk as Craterville. The plat of the earliest Craterville townsite, located in Section 6, Township 2 North, Range 13 West, was filed by J. L. Wiggins on January 23, 1902. Six mining claims, including the Waverly, Victoria, Lawrence, St. Louis, Virgel (spelled Virgil in one source), and Sugdam, are recorded on the plat. All mineral and timber rights were reserved by the miners (Comanche County *Deed Books* 15:330; Comanche County *Plat Books* 1:n.pg.). The Waverly, St. Louis, Virgel, and Sugdam,

all of which were quartz mines, were deeded by J. L. Wiggins to the Craterville Consolidated Mining Company on February 20, 1903 (Comanche County *Deed Books* 15:330).

Wiggins participated in the operation of several early twentieth century Comanche County mining companies, including the Craterville Consolidated Mining Company (Comanche County *Deed Books* 15:330); the Craterville Mining and Water Power Company (Museum of the Great Plains n.d.:n.pg.); and the Lawton Mining, Milling, and Refining Company (Comanche County *Deed Books* 8:34). The Craterville Mining and Water Power Company reserved Section 1, Township 2 North, Range 14 West, the future location of Craterville Park "for Reservoir Purposes" (Fort Sill Museum n.d.:n.pg.). Craterville Park was a locally well-known mid-twentieth century amusement park and campground run by Frank Rush. F. L. Ketch, a prominent local rancher, was involved in both the Craterville Mining and Water Power Company and the Lawton Mining, Milling, and Refining Company (Comanche County *Deed Books* 8:34; Museum of the Great Plains n.d.:n.pg.).

A "Wiggins [mining] Camp" was reportedly located near the northwest corner of Township 2 North, Range 13 West. Since Section 6 is in the northwest corner of Township 2 North, Range 13 West, it seems likely that the Wiggins Camp and the earliest Craterville townsite were one and the same. A "Craterville Mining Camp," established by an unnamed mining company, was advertised in an early twentieth century directory of Lawton (Ayers n.d.:98). This camp was located approximately 35 miles northwest of Lawton, near Mount Scott. It may have been the Wiggins Camp, but it is also possible that there was more than one mining camp in the vicinity during the era. A photograph from the early 1900s indicates that the Craterville Mining Camp consisted of at least seven wooden buildings and structures and one tent (Ayers n.d.:98). The advertisement from the Lawton directory explains that a company had founded the town and was "pushing the necessary works for the treatment of ores" (Ayers n.d.:98).

On December 10, 1902, a plat map of a second Craterville, surveyed by S. A. Joyner, was filed by Marie Louise Trader, the owner of the town. This town was situated in the southeast quarter of Section 1, Township 2 North, Range 13 West, one section west of the first Craterville Townsite. The plat was approved on February 10, 1903, by the United States Department of Interior (Comanche County *Plat Books* 1:42, 63). Trader evidently believed that Craterville had potential as a resort town because the map of Traders' Craterville contained areas reserved for a private clubhouse and private sanitarium (Comanche County *Plat Books* 1:42, 63). Apparently, Trader was not the first to consider Craterville a possible good location for a resort. A 1902 advertisement in the Lawton State Democrat described Craterville as a promising mining location, and went on to assert that "because of its elevation, scenery, surroundings, water, fishing and other attractions, it will be a summer resort for the Southwest not excelled in Colorado or elsewhere" (Morgan 1978:64).

A plat of the town of West Craterville, surveyed by S. A. Joyner, was filed by owner Isaac E. Ferris on August 29, 1902, and approved by the United States Department of Interior February 2, 1903. West Craterville was located in the southwest quarter of Section 1, Township 2 North Range 14 West (Comanche County *Plat Books* 1:61). Thus, West Craterville was situated one quarter section west of Marie Louise Trader's town of Craterville, and one section west of J. L. Wiggins' Craterville.

The plat map of Craterville Park was filed by May and Frank Rush in 1922. Frank Rush, a native of Tennessee, first worked in Oklahoma as a cowboy and ranch hand, and later as a farmer and stock raiser. He worked as a ranger and supervisor in the Wichita Wildlife Preserve beginning in 1907. Rush retired from work at the Wildlife Refuge in 1923, purchasing and developing Craterville Park after his retirement (Wright 1946:161).

Craterville Park was located in the same area as Isaac Ferris' West Craterville: the southwest quarter of Section 1, Township 2 North, Range 14 West (Comanche County *Plat Books* 1:56). A comparison of the plats of West Craterville and Craterville Park makes it clear that there are basic similarities in street, park, and lot layout between the two towns. However, there are differences between the towns. For example, the majority of streets in West Craterville are laid out in straight north-south and east-west lines, while in Craterville Park, most are either diagonal or curved. Craterville Park never reached the size of the town platted in 1902, which was laid out on both sides of Squaw (now Crater) Creek. Only one building, a "Boy Scout House," is depicted on the west side of the creek on the 1922 map of Craterville Park (Comanche County *Plat Books* 1:56; Department of the Army 1956:n.pg.).

The park had a creek, a natural swimming pool, and mountains for hiking. Frank Rush constructed various buildings and structures at the park, including a rollerskating rink, dorms, and mess hall. By 1923, Craterville Park was used by schools for excursions and by "farm women's clubs, scouts, and various other civic groups" (Gunning 1978:139-140). Each August from 1924 until 1932, the park was the site of an All-Indian Fair. There were "agriculture exhibits and arts and crafts displays . . . and a variety of Indian entertainment was carried on, including games, dancing, bow and arrow shooting and racing" (Wright 1946:159). Various tribes and many well-known Native Americans participated, and as years passed, the fair grew in popularity. In 1931, the Oklahoma House of Representatives voted to give \$1,000 in prize money for the fair and to change its name to "Oklahoma State Indian Fair" (Wright 1946:160). Thousands of visitors attended the final fair at Craterville in 1932. In 1933, the year Frank Rush died, the All-Indian Fair was combined with a fair that had been started in Anadarko, and was named the American Indian Exposition (Gunning 1978:143; Wright 1946:160). Thereafter, the yearly American Indian Exposition was in Anadarko. By the 1940s, the Kiowa, Comanche, Apache, Wichita, Caddo, Cheyenne, and Arapaho tribes participated in the fair. Events included "colorful historical pageantry and tribal dances, besides fine exhibits of agriculture, poultry, livestock, household arts, and arts and crafts" (Wright 1946:158).

CHAPTER 4

RESEARCH OBJECTIVES AND METHODOLOGY

by
Duane E. Peter, Stephen P. Austin, and Gathel M. Weston

RESEARCH OBJECTIVES

At the level of survey investigations, the principal research objective is a generalized investigation of changing settlement patterns in the prehistoric and historic periods within the study area. The goal is to understand settlement choices and long-term patterns of exploitation. Therefore, adequate information on site function, context, and chronological placement from both archeological and historical perspectives is essential for the cultural investigations. Determination of site context and chronological placement of the cultural properties is a particularly important objective during the inventory process.

More specifically, the cultural resources investigations were undertaken to: (a) identify both prehistoric and historic archeological sites contained within 10 selected areas of the Fort Sill Military Reservation; (b) evaluate the condition of previously recorded sites within those same areas; and (c) undertake limited geoarcheological investigations to determine the need for additional subsurface investigations. These investigations were undertaken with four primary research goals in mind:

- (1) to locate cultural resources within the designated areas;
- (2) to relocate and evaluate the condition of previously recorded sites within the designated areas;
- (3) to assess the significance of those resources in regard to their potential for inclusion in the National Register of Historic Places (NRHP); and
- (4) to provide recommendations for the treatment of the cultural resources.

The methodologies used to accomplish these goals are presented in the following pages.

RESEARCH METHODS

Prefield Research

Because this survey project was conducted in three phases, the majority of the prefield research was conducted either prior to the initiation of fieldwork in early November 1990 or during the first field season.

1992-1993 Cultural Resources Inventory: Fort Sill, Oklahoma

Consequently, much of the prefield research had been conducted before the initiation of the second season of fieldwork in 1992.

Prefield research was limited to an examination of historic properties records housed at Fort Sill, examination of the archival resources maintained by the Fort Sill Museum, informant interviews with both in-service and out-service personnel, examination of the data base maintained by the Museum of the Great Plains, review of the property listings in the NRHP, and review of the pertinent literature concerning Fort Sill and the surrounding region. Relevant information concerning previously recorded sites and potential sites was entered into a computerized data base based on each survey area. Both recorded and potential sites were plotted on topographic maps of each survey area and were provided, along with print-outs of the data base for each survey area, to field supervisors.

Examination of the Historic Properties Records

In late October 1990, the historic properties records maintained by the Environmental Division were examined by the Principal Investigator. All forms related to previously recorded sites within the boundaries of the Fort Sill Military Reservation were reproduced. The plottings of these sites were transferred to the appropriate U.S.G.S. 7.5' quadrangles and relevant information regarding site location, estimated age, artifact content, and site condition was entered into a computerized data base.

Examination of the Archival Resources at the Fort Sill Museum

Through the cooperation of Towana Spivey, Director of the Fort Sill Museum, the Principal Investigator was permitted in 1990 to examine the historical maps related to Fort Sill and the photographic records pertaining to the Apache prisoner-of-war (POW) villages and the Dutch Reformed Mission. This information was primarily useful during the first phase of this project, with the second phase focusing on areas outside of the cantonment and Apache POW village areas.

Informant Interviews

A component of this survey consisted of the use of oral informants as an approach to understanding archeological sites and site locations at Fort Sill. This research was conducted concurrently with the field research. Information collected from several sources was combined to gain some insight concerning temporal periods, locations, and ethnicity of known and predicted sites at Fort Sill. This approach has been used by several researchers (Binford 1968; Clark 1968; Gould 1971; Gould and Yellen 1987) and has demonstrated the usefulness of conducting informant interviews in relationship to archeological investigations.

Prior to the initiation of the fieldwork in 1990, interviews with Towana Spivey, Director of the Fort Sill Museum, and James Martin, member of the local chapter of the Oklahoma Archeological Society, were informative concerning the nature of the archeological record within the Fort Sill region. Both gentlemen characterized the prehistoric sites of the area as usually exhibiting a low density artifact scatter; consequently, relocation of the sites was sometimes very difficult.

No formal interviews were conducted during the 1992 field season. However, during the survey itself, a number of informal interviews were conducted with both local residents and Fort Sill personnel.

Chapter 4: Research Objectives and Methodology

Valuable information regarding site locations and potential occupants of historic sites was gained from these discussions. Information regarding the location of mines and mine-related activities was particularly useful.

Examination of the Holdings of the Museum of the Great Plains

Prior to the initiation of fieldwork in 1990, discussions were conducted with personnel of the Museum of the Great Plains concerning the available data base for Comanche County. Joseph Anderson, Staff Archeologist, was in the initial stages of developing a computerized data base for Comanche County. The Museum of the Great Plains also has the GLO records for the county on file.

Review of National Register of Historic Places Listings

Examination of the files maintained by the Environmental Division of Fort Sill revealed a number of National Register sites within the boundaries of Fort Sill. None of these properties are within any of the 1992 survey areas and no further research was necessary prior to the initiation of fieldwork in 1992.

Review of the Pertinent Regional Literature

The literature for this region was available through many sources. Several manuscripts were obtained through the Environmental Division of Fort Sill. Arrangements were also made with the Museum of the Great Plains to provide copies of all manuscripts not readily available within the local or university library systems. The results of the literature review and the relevant sources are presented within the Environmental and Cultural Setting chapters of the first volume of this technical series (Peter and Weston 1993).

Pedestrian Survey

An intensive cultural resources survey was conducted to identify both prehistoric and historic sites within selected parcels comprising an area of approximately 17,068 acres within Fort Sill. Of the 16,948 acres originally designated for survey in Areas 1-10 (see Figure 1), all but approximately 70 acres in Area 4 were surveyed; the 857 acres of Survey Area 9 were eliminated and the 831-acre Survey Area 11 was added. The 70 acres of Area 4 that were not surveyed are located in an area bordering East Branch Wolf Creek, which has a high potential for containing unexploded ordnance. An equivalent area of land, consisting of a parcel at the northern boundary of Survey Area 4, was surveyed instead. In addition, a parcel of land totaling 110 acres within the Cantonment Area was added to the survey.

The survey methodology varied according to the ground cover, soil, and topographic conditions within each area. For example, in Area 6, where the terrain is quite mountainous, survey transects were about 60 m apart as the crews followed the contour of the terrain. Due to the lack of soil formation on much of this terrain, shovel testing was quite limited (Table 1). The transect interval was decreased to 20 to 30 m within the Blue Beaver Creek Valley, at the base of the Wichita Mountains, and on the plains, and shovel testing was intensified. Survey Area 11 was chosen for intensive survey of an extensive area with both a 20-m and 30-m interval used.

Table 1
Summary of Intensity of Shovel Testing, 1992 Survey of Fort Sill, Oklahoma

Area	Acreage	Number of Shovel Tests	Average No. of Acres per Test
1	1,300	121	10.7
2	2,177	278	7.8
3	2,785	540	5.2
4	3,034	633	4.8
5	1,524	159	9.6
6	2,859	211	13.5
7	1,111	250	4.4
8	945	135	7.0
10	392	16	24.5
11	831	1470	.6
Cantonment Parcel	110	34	3.2
Total	17,068	3,847	4.4

The fill from the shovel tests was screened through 6.35 mm ($\frac{1}{4}$ in) hardware cloth. More than 3,847 shovel tests were excavated by the survey crews, for an approximate average of one shovel test for less than 4.5 acres of ground covered (see Table 1). More specific information concerning the survey methodology for each area is presented in Chapter 6 of this report.

Once a site was located, either on the basis of shovel testing or through the discovery of surface materials, the site limits were identified through shovel testing. Generally, a minimum of eight shovel tests (each approximately 30 cm in diameter) was excavated at each site, although at heavily disturbed sites with little soil as few as two shovel tests were excavated. A limited number of sites was not shovel tested due to the lack of any surface sediments or the high potential for unexploded ordnance.

The soil from each shovel test in the site area was screened through 6.35 mm ($\frac{1}{4}$ in) hardware cloth. If possible, all shovel tests were excavated to the base of the culture-bearing deposits. All artifactual materials recovered both from survey and site shovel tests were collected and analyzed. The locations of all excavation units were plotted on a site map.

A site form recording locational information, vegetation cover, contextual integrity, estimated temporal period, and artifactual material was completed on the site. A scaled pace-and-compass map was prepared in pencil for each site on graph paper. A complete photographic record, including both black-and-white prints and color transparencies, was kept and used to record identified cultural remains, the general topography and condition of the area at the time of the survey, and the field techniques and methodology employed. Each site was photographed from at least two viewpoints, including any damage evident to the cultural property by vandalism, construction, or earth disturbances of any kind.

Chapter 4: Research Objectives and Methodology

Surface collections of both historic and prehistoric materials were intended to involve only temporally diagnostic artifacts or tools. On historic sites with surface materials, special attention was paid to decorated ceramics, decorated and embossed glass, and pieces with maker's marks or indications of manufacturing technology; general samples of undecorated earthenwares, stonewares, window glass, colored glass, and nails were collected as well. In such cases, only the limits of the surface scatters were mapped.

Each recorded site was identified by a permanent marker placed on the site, consisting of a circular aluminum tag given a temporary site number in the form of "92-xx" (92 indicates fiscal year 1992). Temporary site numbers ran consecutively, beginning with number "1" and ending with number "62" during the first field season, and resuming with number "63" and ending at "148" in the 1992 field season. Thus, the first site recorded in 1990-1991 was labeled "91-1," the second "91-2," while the 1992 season started with site 92-63. Permanent site designations were later provided by the Oklahoma Archeological Survey, Norman. Site designations were applied only to clusters of artifacts (whether surface or subsurface) that gave the appearance of being preserved occupation or activity areas. Other areas that showed no evidence of preserved archeological deposits, such as isolated finds, unique nonsite features, or recent trash dumps, were designated as "localities." All evidence of post-1940 military activities were similarly classified. Such localities were recorded in the field as to specific locational information and field interpretations and were assigned field numbers in the form of 92-XXX, starting with "200" and ending with "265." Field notes concerning sites and localities were maintained by the Field Supervisor. The field notes, along with the Field Supervisor's survey maps, were also used to document survey conditions, vegetation cover, amount of area covered daily, and initial interpretations of the cultural resources.

Archival Research

Archival research during this project played a significant role in identifying most of the historic components found in the research areas. This research began during the survey and continued through the production of the report. Before the survey began, a number of local and regional sources was examined that described the historic resources of the region. Historic maps, photographs, and other historic publications and secondary sources were consulted.

Intensive archival research for this project began in January of 1991 with an examination of the extant maps and property records on file at Fort Sill. Additional research was conducted in 1992, consisting of the examination of 1943 aerial photographs of the Fort Sill Military Reservation provided by the Directorate of Public Works. The Fort Sill Museum supplied several documents, including copies of historic photographs relating to the location of historic resources in the area and maps and reports of officers. The Real Property Office at Fort Sill supplied copies of land plats showing the properties acquired in 1940 and 1956 during the expansion of the reservation. This research helped place the owners of tracts of land in connection with located historic sites. An associated deed and title search was then conducted in an attempt to discover the ethnic affiliation of the individual owners of these properties.

The archival research related to this portion of the project was conducted at several locations, including the above offices, but the primary source of deed information came from the Comanche County Clerk Office in Lawton, Oklahoma. Only primary title documents were initially examined for significant occurrences or personages connected with the properties identified as containing historic components. During these title searches, the identification of the Comanche Indian allotments was discovered. Since it was reported by Nye (1969) and other informants that many of these Indian allotments were leased by tenants, other sources of information, such as census material and tax records for the area were sought.

1992-1993 Cultural Resources Inventory: Fort Sill, Oklahoma

A lack of census records in Lawton and the destruction of county tax records for the area curtailed that portion of the research.

A portion of the archival search was conducted at the Oklahoma State Historic Preservation Officer's (SHPO) Office of Preservation in Oklahoma City. Documents discussing the region's area-wide context themes and previously recorded historic sites, both National Register sites and National Historic Landmark sites, were reviewed for the area.

Geoarcheological Investigations

Geoarcheological investigations associated with this survey were conducted during November 1993. Mr. Floyd B. Largent, Jr., spent two days examining cutbanks along West Cache and Post Oak creeks. Physical descriptions of the soil horizons from each profile were conducted in the field. Bulk samples for humate dating or granulometric analyses were collected from representative profiles. The results of the geoarcheological studies are presented in Chapter 5.

Prehistoric Artifact Analysis

The analysis of the prehistoric artifacts collected within the Fort Sill area by this project was designed to characterize as fully as possible the range of activities represented on each site, and makes use of artifact categories used previously in Texas and Oklahoma (see Appendix A for lithic artifact definitions and the summary table for the analyzed prehistoric artifacts). A total of 640 prehistoric artifacts was collected from the sites recorded within the present survey areas on Fort Sill. During the analysis of this material, each artifact was examined in sufficient detail to allow the identification of specific attributes and its placement into a specific artifact class (see Appendix A).

The major artifact classes identified by this analysis included projectile points, bifaces, unifaces, lithic debris, and ground stone. In addition, nonartifactual cultural remains such as unworked cobbles and burned rock also were identified and analyzed. All the prehistoric artifacts recovered by the present survey consisted of lithic materials (see Appendix A). These artifacts were identified by class and subclass, raw material type, percentage of dorsal cortex (if present), and location of use wear (if present). In addition, the dimensions (i.e., length, width, and thickness) and the weight of all lithic tools were recorded, while the lithic debris was size-graded into six categories (i.e., less than 1 cm, 1 to 2 cm, 2 to 3 cm, 3 to 4 cm, 4 to 5 cm, and greater than 5 cm).

Historic Artifact Analysis

The analytical framework used for the examination of recovered material from this survey was modeled after Stanley South's (1977) artifact pattern analysis method. Because of the limited sample recovered from the majority of the sites, the analysis of the artifactual material was modified so that only identifiable material was used to determine any existing patterns. The low artifact density encountered at many of the sites makes thorough descriptions of site contexts difficult. In this case, only generalizations about site types are noted because of the lack of real diversity in the assemblage across most of the sites. The limited recovered data also effectively preclude historical details relating to demography or social organization to be presented here; however, there are some notable exceptions, i.e., the Apache prisoner-of-war camps.

Four major categories were used for assignment of the recovered artifacts: domestic, architectural, personal, and activities. These major categories are sorted into various subcategories, and then often sorted into classes, types, and subtypes. The domestic category designation was used for items related to food service (tableware) and food storage (including food preparation). Some ceramics and glass are not considered connected with food service or storage and the difficulty of assignment to particular categories was considered prior to the analysis of the artifactual assemblage from Fort Sill. Some items, such as washbasins, chamberpots, and glass motor oil jars, present a recognition problem. Separation of these objects is difficult and, because of the small sample involved here, unnecessary. Domestic material also includes household furnishings such as furniture, stoves, and lamp glass. The architectural category includes all items related to buildings such as brick, mortar, plaster, nails, window glass, and electrical items. The personal category indicates items of individual use such as clothing, buttons, shoes, dolls, and smoking pipes. The activities grouping includes any nonhousehold items, transportation, farm-related equipment, tools, and firearms. Unidentified metal fragments, questionable ceramics or glass (those artifacts that were unidentifiable as to domestic tableware or storage, architectural, personal, or activities [n=87]), were not included in the final analysis and are simply identified as unknown. Additionally, because of the limited subsurface evidence present at most of the located sites, the surface-collected diagnostic material is included in the primary analysis to help establish a beginning occupation date.

Similarly, date ranges for these sites were attempted using a modified version of South's (1972) evolution and horizon in ceramic analysis work. This type of analysis uses knowledge of production dates for ceramics and the popularity of types as a basis for understanding the temporal and spatial changes at historic sites. Because of the difficulty in analyzing sites with similar ceramic assemblages of extended periods of production, especially when the ceramic assemblages are of very low density, this analysis uses some glass as an analytical tool to assist in understanding temporal occupation spans. The discussion of each of the sites attempts to use datable glass as data to assign possible occupation periods to these sites by using the beginning manufacture time of certain types of production glass.

Standard analysis techniques for ceramics tend to assume a standard popularity curve that is placed closely to the median date of the ceramic type. Given the difficulty in assigning dates to undocumented sites with limited test data, investigations of these sites may benefit from examining more closely other datable material. It is thus possible that datable glass may serve as an additional tool. Using a statistical formula similar to that created by South (1972) for ceramic median dates, this analysis attempts to define an early occupation date for each of the sites using dates obtained from assumed popularity of use date ranges for some ceramics and the beginning dates of production for certain manufacturing attributes on glass types. These dates simply mark the beginning of a production type or process, or the assumed beginning of an item's popular appearance, termed here as the beginning production (or popularity) date (BPD). A possible early occupation date is determined by summing the known beginning production dates for certain diagnostic artifacts and dividing that number by the number of artifacts. This date is called the mean beginning date (MBD) by Lebo and Brown (1990) and is useful when the use date range of an artifact extends over a long period of time, especially when the use and manufacture of an item extends to the present. The use of this dating technique is by no means meant to be a panacea, but rather is exploratory in nature and needs substantiation by other data, such as archival information. Its use here indicates some inconsistencies in the methodology. All sites with diagnostic material are analyzed on the basis of the functional types of material found and a beginning date range assigned based on the type of material recovered. This date is compared to other information from the archival data and previous surveys where the material is available (Appendix B).

The abundance and variety of late nineteenth and twentieth century glass offers a unique research tool with which to evaluate sites. Mold types, embossing, glass type, and other attributes can be used to perform the same tasks as is accomplished with South's (1972) formulas. Further, it is distinctly possible that the socioeconomic status of glass types may be discoverable with further research into the use of these objects and their place in the social sphere. Simply, one needs only to understand the difference between a crystal wine glass and a "muppet" drinking glass to begin to understand where the cognitive differences are located.

One of the primary difficulties in attributing occupation periods to many of the historic sites of the late nineteenth and early twentieth centuries in this region is the available classification schemes for the ceramic assemblages present at these sites. At present only a general classification scheme is available, which separates ceramics on the basis of body paste type, glazes, form, and other attributes. A similarity of types, plainwares, and extended periods of production for some ceramics makes analysis difficult. A possible lack of penetration of particular wares or, more likely, a shared set of ideas about what is proper and appropriate behavior in relation to foodways, further confounds the picture. A rural-urban distinction in foodways in North-Central Texas is discussed by Journey and Moir (1987). They state in their research volume on the Richland Creek area that most households in that region tended to avoid ". . . highly decorated, popular, or highly commercialized ceramic vessel forms until the early twentieth century" (Journey and Moir 1987:97). Indeed, these undecorated ceramic wares do appear with more regularity in most of the assemblages recovered at Fort Sill, Oklahoma. The exception is a notable one, since the ceramics recovered at the sites of the Apache prisoner-of-war villages tend toward a more expensive variety of ceramic such as hand painted and flow blue wares. It is obvious another analytical tool is needed, not only to be able to place these sites temporally, but to understand them as reflections of social processes.

No economic scaling (Miller 1974, 1980) was attempted for either the ceramics or the recovered glass. However, this should not be taken to mean that an analytical framework is not possible. It is possible and necessary. Both Wobst (1977) and Hodder (1979, 1985) have discussed symbolic display between groups in relation to marking resources and social boundaries. As the size of the group, or competition, increases, and more interaction occurs with those of different status, material symbols will change in some area. These stylistic similarities and differences will appear in some shared areas and not in others. Thus, the similarity found in plainwares may be offset by material symbols of difference or status in objects not normally considered by researchers. The material recovered from the Apache villages may reflect this very process. Using this same idea, glass types may hold the same interpretive status as decorated ceramics, particularly when examining sites from the late nineteenth century through the depression era, a period when a proliferation of glassware occurs. Nothing of this magnitude was attempted here, but the structural logic exists for a framework from which to begin to examine these ideas.

Detailed descriptions of nineteenth and twentieth century ceramic types have been covered in other publications (Hughes and Hughes 1968; Lofstrom 1976; Lofstrom et al. 1982; Price 1979; and others) and will not be repeated here. Other reference books used to identify certain diagnostic traits include Fike (1987), Godden (1964), Lorel and Korel (1953, 1986), Lehner (1978, 1988), Toulouse (1970, 1971), and Wetherbee (1980). Similarly, glass has been described in a great number of publications (Ferraro and Ferraro 1966; Fike 1966; McKearin and McKearin 1968; Muncey 1970; Walbridge 1969; and others) and also will not be repeated here. The results of the historic artifact analysis are presented with each site description and in Appendix B.

CHAPTER 5

GEOLOGICAL STUDIES

by
Floyd B. Largent, Jr., and David Shanabrook

GENERAL GEOLOGY AND GEOMORPHOLOGY

This study examined portions of the western half of the Fort Sill Military Reservation--specifically, the alluvial deposits along West Cache and Post Oak creeks. The generalized geology for the Fort Sill area has been detailed by Shanabrook (1993) in Volume I of this technical series (Peter and Weston 1993). Briefly, the near surface geology of this area consists of gabbros and basalts of the Early to Mid-Cambrian age Roosevelt Gabbros (recently dated to 550 million years before present [B.P.]) of the Raggedy Mountain Gabbro group overlain and/or intruded by granites and rhyolites of the Mid-Cambrian age (500 to 525 million years B.P.) Wichita granite and Carlton rhyolite groups. After a period of erosion that left a surface with as much as 100 m to 200 m of relief, these igneous units were in turn overlain by over 125 m of arkosic sands and shales of the Mid- to Late Cambrian Reagan sandstone, and an unknown amount of shallow marine limestones, dolomites, and shales of the Cambro-Ordovician Arbuckle group. Other shallow water carbonates, shales, and sands of Ordovician to Mississippian age may have been deposited in this area based on observed rock ages and thicknesses from surrounding areas but they have all now been removed by later erosion. After a period of extensive folding, regional uplift, and renewed fault activity in the Pennsylvanian, this highly irregular post-Mississippian erosional surface was later covered by the Permian age (approximately 270 million years B.P.) red shales, sands, and conglomerates of the Post Oak Conglomerate formation of the Hennessey group (Gilbert 1982:25-28). Further structural readjustments and extensive erosion over the next 200 million years produced a deeply sculpted surface on which every geologic unit named above was exposed to a greater or lesser extent. In the more recent past, Quaternary gravels, sands, silts, and clays have accumulated on this heavily eroded surface by in situ soil development, ongoing erosional processes, and alluviation in the stream valleys that cross this area. This Quaternary alluvial cover ranges in thickness from less than 1 cm to more than 12 m. A more detailed and in depth discussion of the complex geologic history of this area can be found in Ham et al. (1964) and Gilbert and Donovan (1982).

The pre-Quaternary geology in this portion of Fort Sill is important for two main reasons: first, its role as a source for the Quaternary sediments that are the principal object of this geologic study, and second, as a control of the types of depositional environments in which the Quaternary sediments were deposited. In the study area, the Quaternary deposits that unconformably rest on the Permian and older sedimentary and igneous rocks consist primarily of younger Holocene-age clays, silts, sands, and gravels that were deposited principally by alluvial and fluvial processes in the stream valleys. The Pleistocene deposits noted

by previous researchers (e.g., Hall 1978; Shanabrook 1993), which are thought to be remnants of ancient alluvial terraces, were not exposed in the current study area.

The Holocene-age sediments form the surface layer on both the major floodplains of the streams in this portion of Fort Sill and they rest unconformably on all of the older rock units described above. The thickness of the Holocene-age sedimentary deposits varies greatly within the study area. In the valleys of both West Cache and Post Oak creeks, average sediment thicknesses of 3 to 4 m above bedrock were observed, although the thickness in some areas may be greater or lesser due to variations in the topography of the bedrock surface. During Shanabrook's (1993) investigations of Ketch, Medicine, and East Cache creeks, however, sediment thicknesses of up to 7 m were noted; Hall (1978) reports similar sediment thicknesses.

The Holocene sediments that were examined, which are described in more detail in a succeeding section and in Appendix D, were derived by a variety of processes ranging from extended fluvial and alluvial reworking of earlier Holocene, Pleistocene, Permian, and pre-Permian deposits to simple downwearing of exposed bedrock units. Weathering and subsequent erosion of the exposed Carlton rhyolites, Wichita granites, and Hennessey sandstones probably have provided a considerable portion of the sediment carried and deposited by both creeks in the recent past. Regardless of the origin of the sediments being laid down, the dominant depositional process responsible for the observed sediments was fluvial action. To be specific, the near-surface Holocene sediments appear to have been laid down as a sequence of point bar, levee, back swamp, and associated deposits of low-sinuosity, meandering streams. Further, West Cache Creek and, to a lesser extent, Post Oak Creek show signs of periodically having switched the location of their channels by the process of lateral channel migration and, possibly, avulsion.

FIELD METHODOLOGY

The geologic studies that were conducted at Fort Sill were oriented toward examining the near surface sediments to determine the types, the relationships to each other (if any), the environment and method of deposition, and the relative ages. The goal was to be able to gain an understanding of the formation of the alluvial deposits and stream floodplain in this part of Fort Sill. Humate samples were submitted for radiocarbon assay; these dates aided in refining the data and allowed a better assessment of the potential of these areas to contain significant cultural resource sites, either buried or on the surface. It was decided to focus the bulk of the investigation on two areas, the floodplains of West Cache and Post Oak creeks, since these were the two major streams that drained the survey areas examined for cultural resources during the 1992 field season. A brief field reconnaissance and earlier studies conducted by Hall (1978) had indicated that these areas were most likely to be favorable sites for the location and preservation of cultural materials, either buried or on the surface, based on topographic or other considerations. Specifically, it was decided to examine and describe a number of cutbank exposures (Figures 2 and 3) in order to study the sediments in several areas along the creeks, to collect data on sediment types and stratigraphic relationships, and to provide data for the construction of generalized composite cross sections through the floodplains (Figures 4 through 7, Profiles 1-4).

GENERALIZED SEDIMENT DESCRIPTIONS

Four cutbank profiles were examined and described. In addition, bulk sediment samples were collected from each stratigraphic unit examined. All the observed sediments appear to be of late Holocene age. A complete profile description for each of the cutbanks is given in Appendix D.

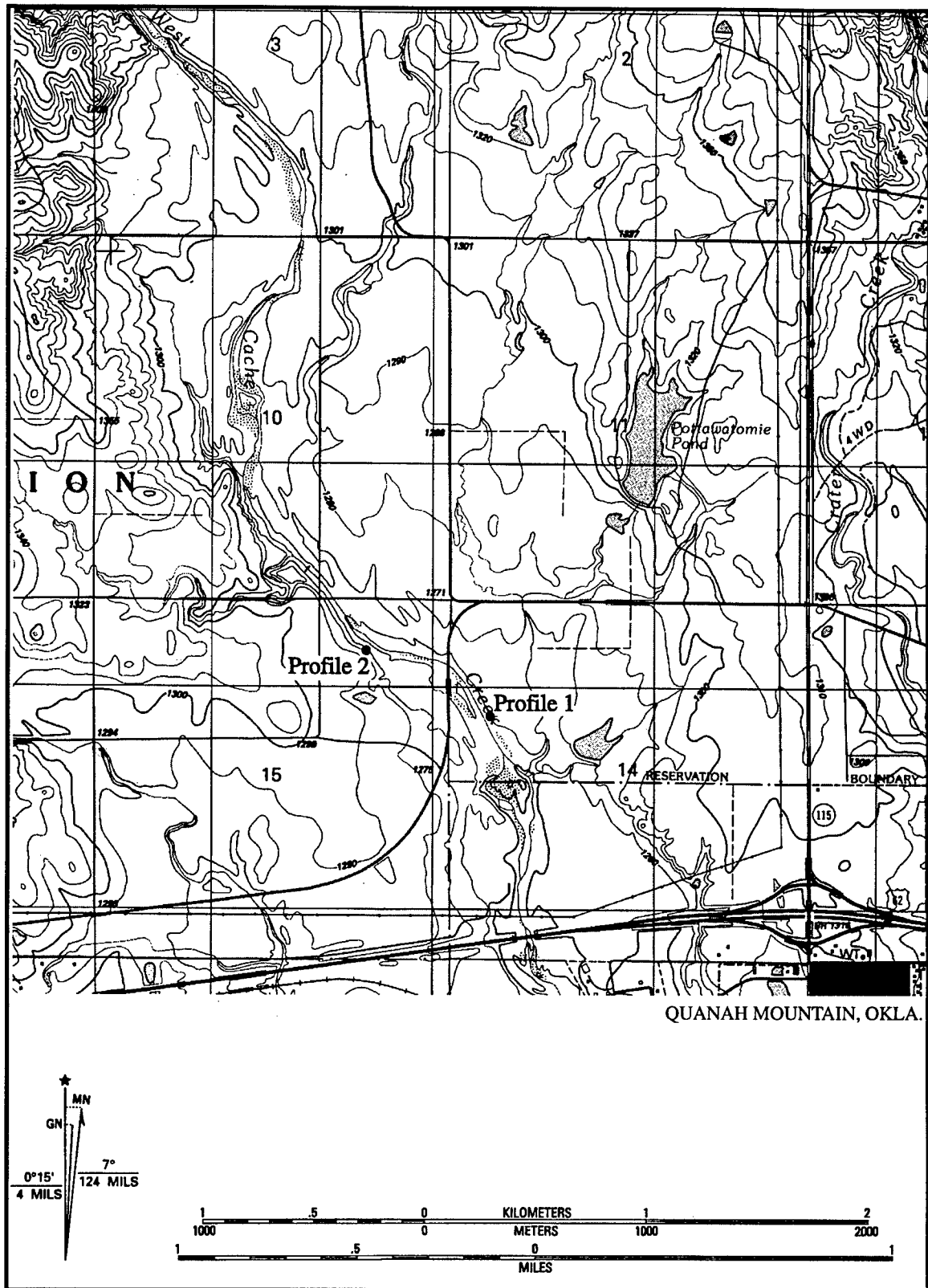


Figure 2. Location of cutbank exposures examined along West Cache Creek.

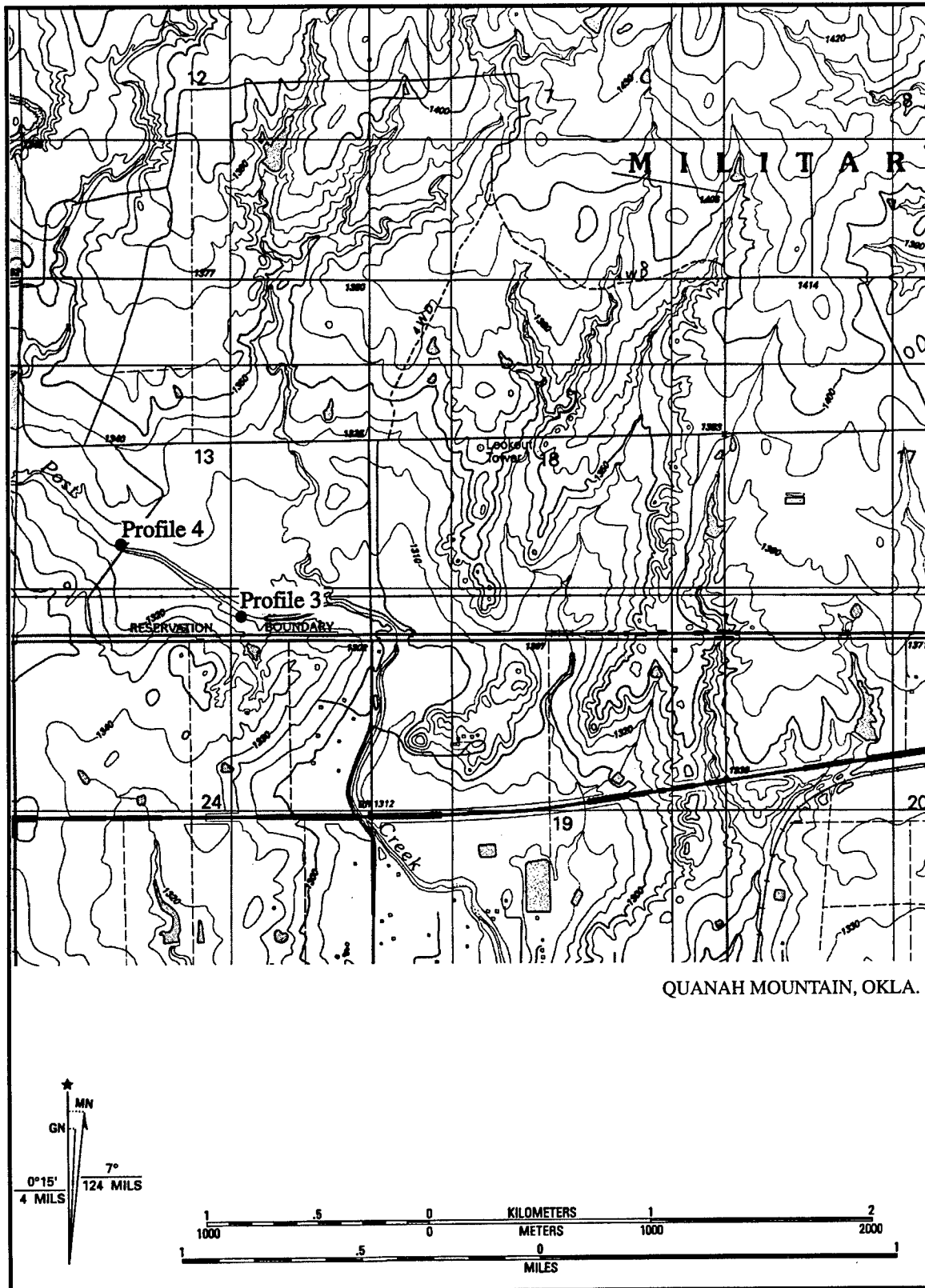


Figure 3. Location of cutbank exposures examined along Post Oak Creek.

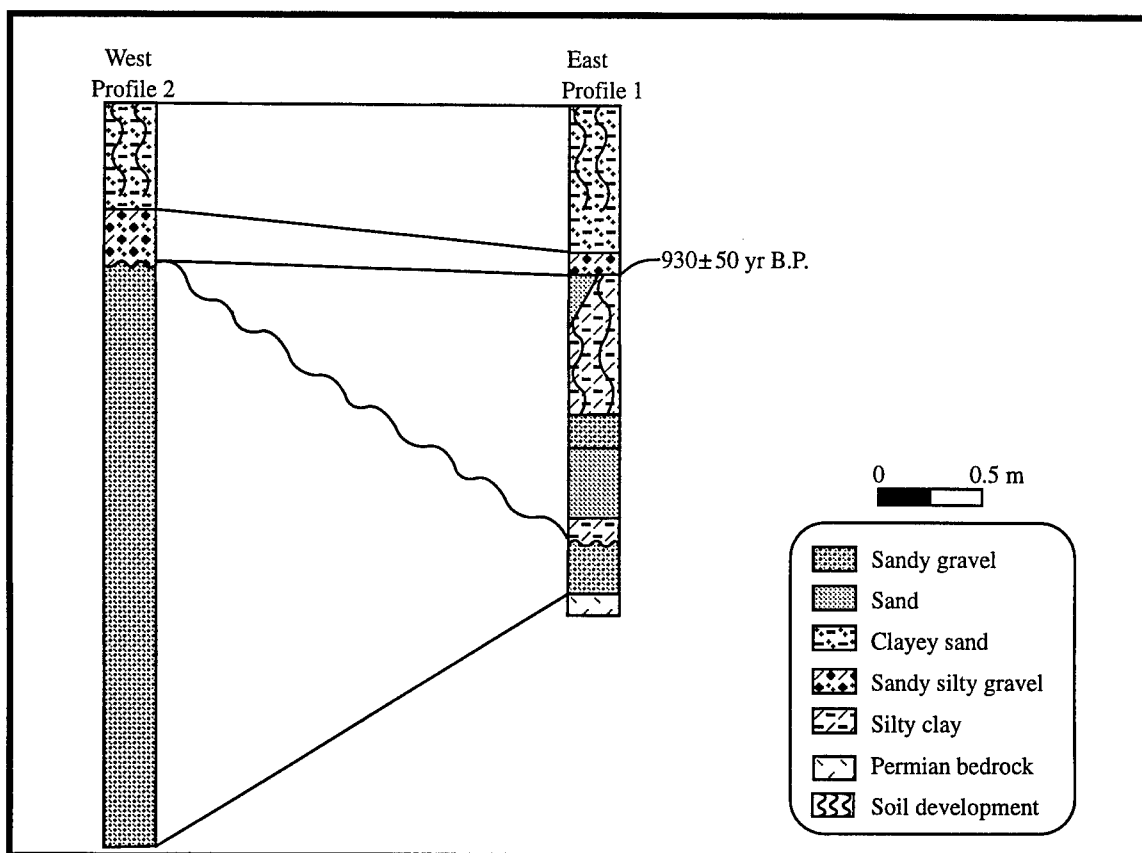


Figure 4. Correlations of stratigraphic units in Profiles 1 and 2 along West Cache Creek.

The dominant depositional process for the bulk of the sediment observed in the study area was fluvial, although colluvial sediments were observed on two of the cutbanks (see Figures 5 and 7). The sediments observed ranged from silty clays and silty sands to coarse-grained arkosic sands and gravels composed of cobble-sized clasts of granite and sandstone. Figures 4 through 7 show stratigraphic and comparative cross sections through the lower portions of both stream valleys in the study area. Although there may be some influence by colluvial/slope wash processes on the deposits observed in some areas, few of the sedimentary deposits observed could be attributed to them. On the other hand, there is considerable evidence of exposure and erosion of earlier deposits, rapid shifts in sediment source and types, periods of slow or no alluviation and soil formation, and point bar and levee formation. All of these things would be quite typical of sediments laid down by a sinuous, meandering, avulsing fluvial system. In addition, there is also clear evidence that the coarser- and finer-grained sediments have been highly segregated by the depositional process. That is to say, the profiles contain relatively few (2 to 9) zones of either gravel, sand, silt, or clay with an average thickness of approximately 50 cm as opposed to numerous alternating, thin layers of varying lithology. This is a pattern that would be normal for fluvial deposits of a meandering or anastomosing stream, where the coarser clastics such as sand and gravel are concentrated in point bar, crevasse-splay, or levee deposits in or near the meander or channel belt while the finer sediments such as silt and clay are concentrated in back swamp or overbank flood deposits on the floodplain on either side

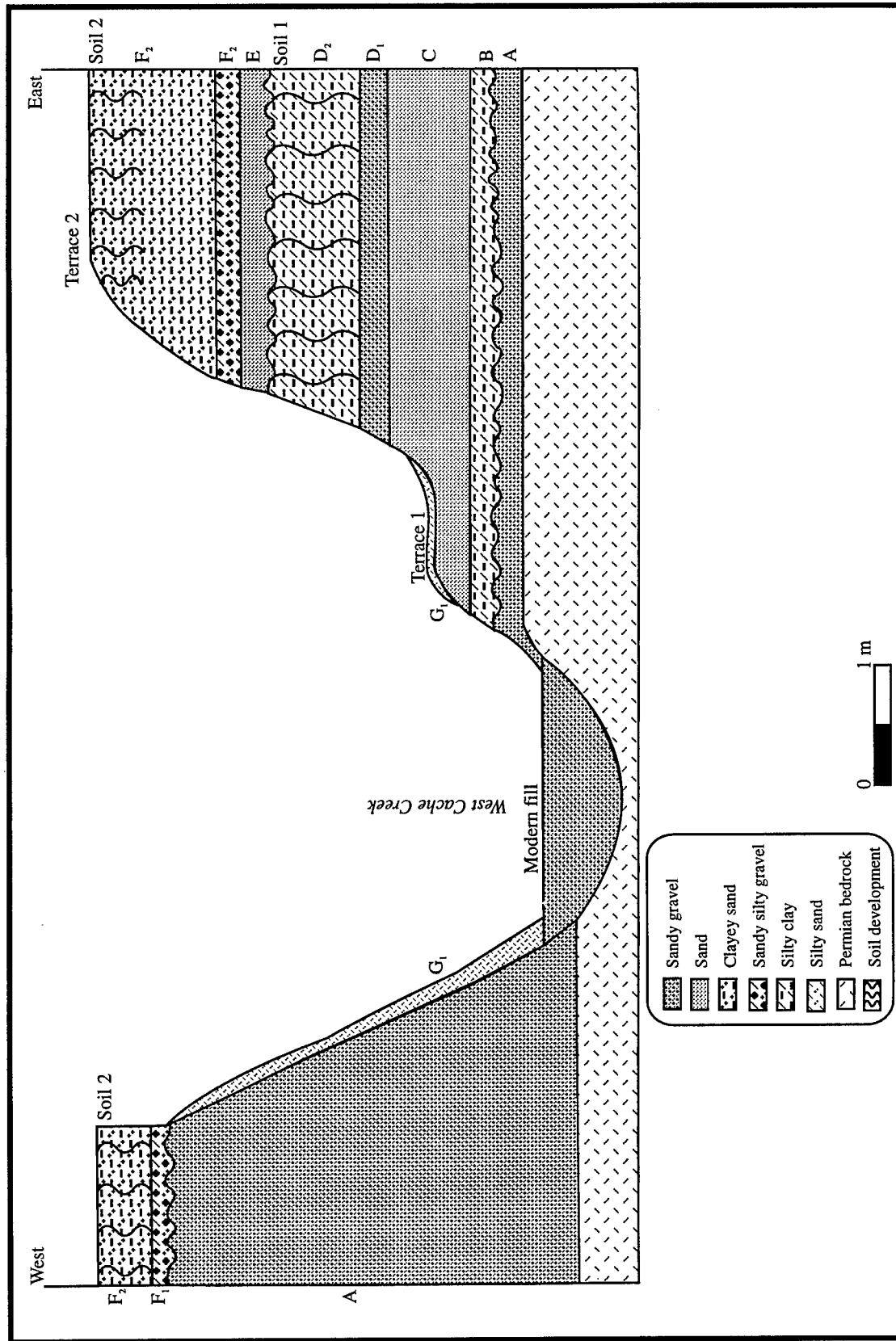


Figure 5. Generalized, composite west to east stratigraphic section of West Cache Creek floodplain.

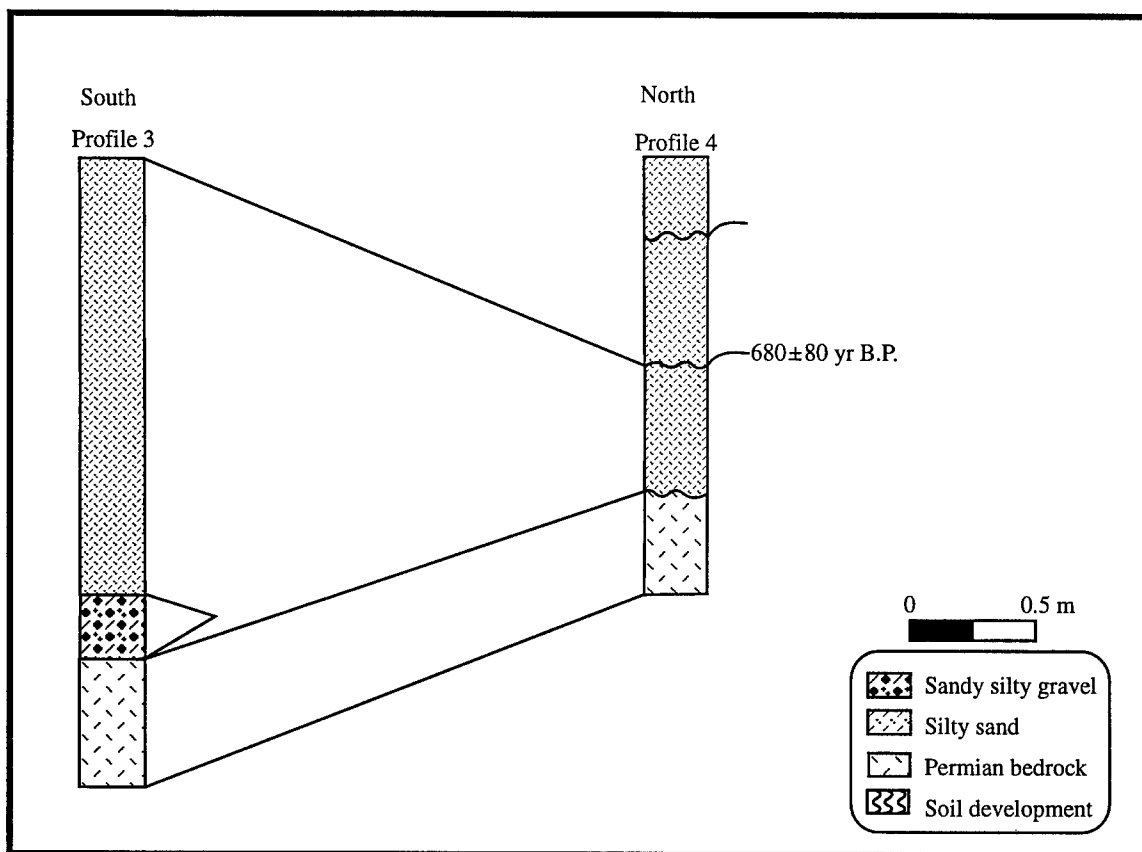


Figure 6. Correlations of stratigraphic units in Profiles 3 and 4 along Post Oak Creek.

of the active channel belt (Cant 1982:119-120; Reading 1978:Chapter 3). Three of the examined profiles show a distinct fining-upwards sequence in part (see Figures 4 and 6, Profiles 1, 2, and 3).

Many of the sediments observed in the profiles were clays and sands, some of which were silty or gravelly in part. These sediments also displayed evidence of periodic hiatuses or diastems in sedimentation or large reduction in the average rate of sedimentation either in the form of buried surfaces that displayed evidence of organic enrichment and soil formation (Profiles 1 and 4) or prominent lag gravels (Profiles 1 and 2 are good examples of this). All of these factors--fine average grain size, variation in sedimentation rates, exposure to sub-areal erosion, and removal of fines to produce lag gravels--indicate that these clayey, silty, and sandy units were laid down outside of the active channel belt probably in the back swamp/overbank floodplain depositional environment. The sand, clayey sand, silty sand, and silty clay sediments probably represent deposition during periodic inundation of the back swamp by floodwaters. Some of these sediments may have been carried onto the floodplain by the intermittent streams that drain the high ground to the west and later reworked by floodwaters. Some of these units may also represent sedimentation in oxbow lakes and abandoned channels. The relationship of the sandy and clayey facies indicates that the streams in the study area shifted their active meander belts with some degree of frequency over time. Although evidence is meager at this time, the nature of the deposits would tend to imply that the shifts were occurring mostly by lateral channel migration rather than by avulsion.

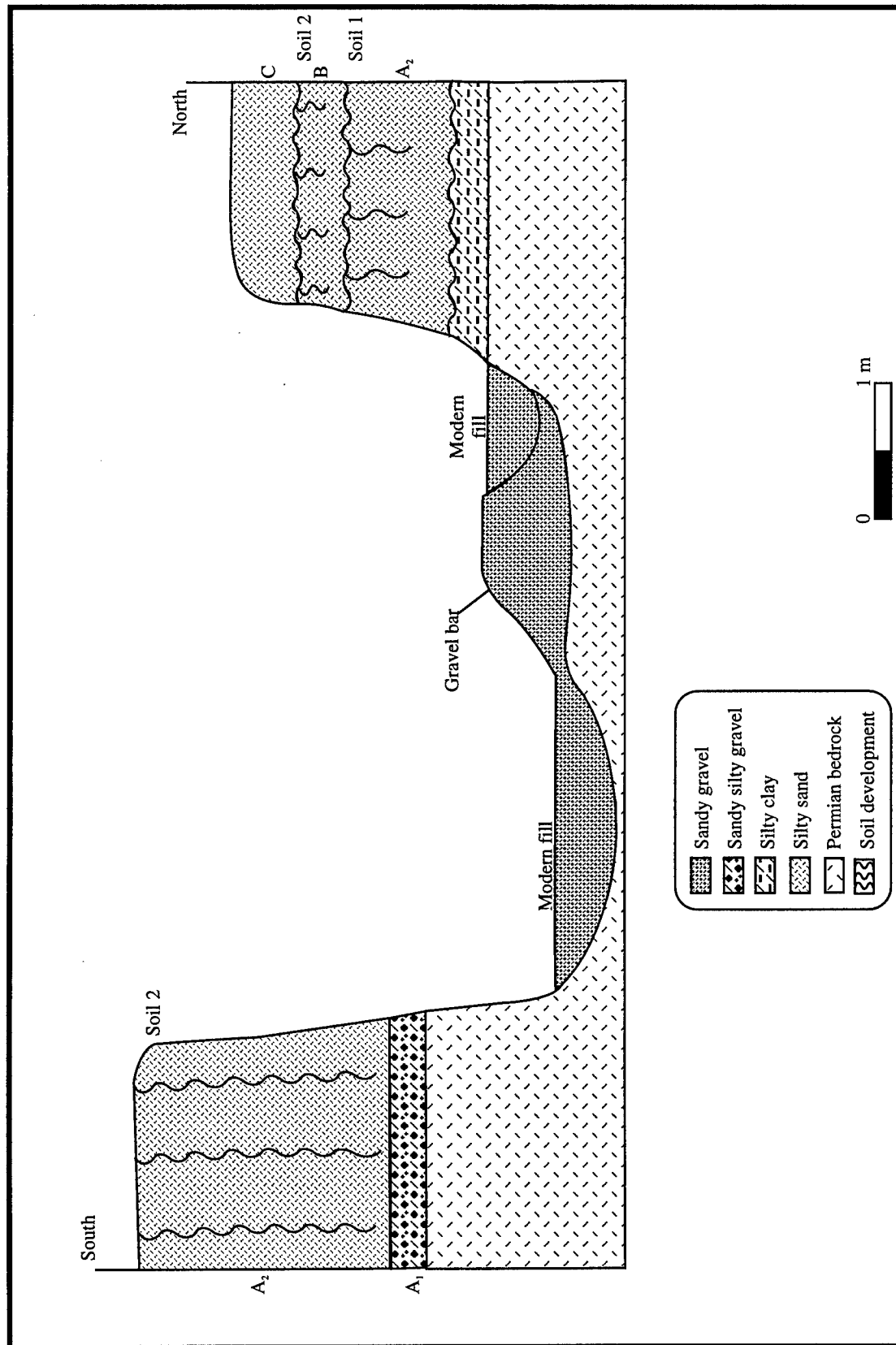


Figure 7. Generalized, composite south to north stratigraphic section of Post Oak Creek floodplain.

The soil profiles of the observed floodplain deposits range from moderately developed to very poorly developed. Development observed in the examined soil profiles ranges from simple A-C-R profiles to more complex A-2Ab-3Ab-R and A-C1-C2-2Ab-2C-3C-4C-5Ck-R profiles. The general lack of pedogenic development may be due to the deposits being of relatively recent age. However, it should also be noted that soil development may have been severely retarded: first, by the constant wetting and poor drainage common to an active floodplain; second, by the frequent, periodic erosion and removal of the organic rich upper members of the soil (i.e., the O, A, and B horizons) by flood and stream action; and third, by the periodic deposition of fresh alluvium on portions of the existing surface. The effects of the erosional scouring and deposition of fresh alluvium are readily apparent in Profile 2, where there is minimal soil development and little accumulation of organic rich zones. The three paleosols that were observed (see Figures 4 and 6, Profiles 1, 3, and 4) had apparently all been truncated by later erosion before being buried.

To summarize, soil development in the study area ranges from moderate to very poor. The low level of development indicates that much, if not all, of the sediment observed is Late Holocene in age. The available data also indicate that some of the soil profiles' "youthful" appearance is probably due to factors other than strictly recent deposition.

GEOLOGICAL INTERPRETATIONS

In this section of the report, an attempt will be made to interpret the depositional history of each of the drainages, based upon the sediment profiles observed in the four cutbanks examined. These interpretations must be considered strictly tentative, as the data collected during the course of this investigation were minimal, no marker fossils were observed in any of the deposits, and at this time no radiometric ages have been obtained for any of the sediments. Thus, the depositional histories of both West Cache Creek and Post Oak Creek may be discussed only in the most general of terms.

West Cache Creek

The West Cache Creek drainage basin is underlain by highly weathered sandstone bedrock of Permian age, as may be observed in Figures 4 and 5. The stratigraphic history is complex and seems to be expressed most strongly on the eastern side of the stream valley, as demonstrated in Profile 1. Table 2 presents an abbreviated, generalized description of the stratigraphic units observed along cutbank profiles on West Cache Creek.

The first geological event (aside from bedrock deposition and erosion) recorded in this valley is characterized by Unit A, a densely packed layer of rounded granitic cobbles in a sandy matrix that directly and unconformably overlies the sandstone bedrock. This stratigraphic unit measures up to 280 cm thick in some portions of the stream valley (see Figure 5), and bears some resemblance to the Unit A observed in the Post Oak Creek valley (see below). Some portions of this unit are overlain by Unit G, a thin, recent colluvial unit that derives from overlying sediments, most likely Unit F₂.

After deposition, Unit A was subjected to extensive erosion, possibly as the result of the stream channel laterally migrating toward the east; in some cases, all but a few centimeters of this unit were removed and reworked into newer sediments.

Table 2
Unit Descriptions for Generalized West Cache Creek Stratigraphic Profile

Unit	Maximum Observed Thickness	Description
G	10 cm	Silty sand colluvium derived from Unit F3
F ₂	110 cm	Clayey sand, Soil 2 developed on top; surface unit
F ₁	10 cm	Rounded gravel in a sparse clayey sand matrix, cobbles up to 20 cm in diameter
E	40 cm	Discontinuous coarse sand unit or lens
D ₂	60 cm	Silty clay, Soil 1 developed on top (930 ± 50 yr B.P.)
D ₁	60 cm	Sandy, fine, angular gravel, clasts up to 3 cm in diameter
C	100 cm	Medium to coarse sand
B	20 cm	Silty clay
A	280 cm	Sandy gravel
BEDROCK	?	Sandstone Permian bedrock

The fluvial event that removed much of Unit A also deposited Unit B, an isolated silty clay unit conformably overlain by Unit C, a coarse layer of arkosic sand. A portion of Unit C is overlain by Unit G, particularly along the upper slope of a small erosional terrace formed by a cutting episode that will be discussed later.

Unit C is conformably overlain by Units D₁ and D₂, genetically related fine, sandy gravel and silty clay units. Unit D₁ consists of angular, arkosic gravels in a coarse sandy matrix; the clasts in this unit do not exceed 3 mm in diameter. Unit D₂ is made up of silty clay, which is eroded throughout its thickness; soil development stops abruptly at the top of Unit D₁. This buried soil, or paleosol, has been designated West Cache Creek Soil 1 (S1); the upper 15 cm of this unit yielded a radiocarbon age of 930 ± 50 yr B.P. (Beta 76101), indicating a late Holocene origin. The presence of Soil 1 indicates that a lengthy period of stability followed the deposition of Unit D; perhaps, at this point, the stream channel migrated back toward the western side of the floodplain, though evidence supporting this hypothesis is lacking. In any case, the upper portion of the unit appears to have suffered from erosion, indicating that at least part of the exposed surface was stripped away, most likely by alluvial activity.

Unit E consists of a sand unit that unconformably and discontinuously overlies Soil 1. Only a small portion of this unit was observed in Profile 1, so it is not known whether this represents an actual discontinuous

stratigraphic unit, or merely some sort of lens. The possibility exists that this unit represents the fill of a small, first-order distributary channel that developed atop Soil 1 during Unit D's long period of stability.

The formation of Soil 1 was followed by another flooding episode, characterized by overbank flooding on both sides of the stream, which deposited Unit F. Unit F consists of Units F_1 and F_2 , genetically related sandy gravel and silty clay units. At Profile 1, F_1 rests unconformably on Soil 1; at Profile 2, it unconformably overlies Unit A. Unit F_1 is most recognizable as a thin band of sandy gravel that grades gradually into Unit F_2 , a clayey sand, in all examined portions of the stream valley. The upper portion of Unit F_2 has developed into Soil 2 (S2).

The episode and mechanism that created the lower erosional terrace (T1) remains uncertain. This terrace may have been created when the stream downcut through the eastern portions of Units C-E, deposited Unit F, and then avulsed or migrated back into the western part of the floodplain. The modern channel would thus have been created when the stream downcut through existing units into the bedrock and then migrated back toward the east, removing the west wall of the previous relict channel, and leaving the base of the channel as T1. Alternately, this terrace may have been somehow created during the erosional event that created the modern channel. Modern channel fill consists of a mixture of sand and large granitic cobbles up to 30 cm in diameter.

Post Oak Creek

A brief description of the stratigraphic units observed in cutbank profiles along Post Oak Creek is presented as Table 3. As with West Cache Creek, the Post Oak Creek drainage basin is underlain by sandstone and claystone bedrocks of Cambrian and Permian age; indeed, in Profile 3, the underlying bedrock consists of interbedded layers of sandstones and claystones that are so highly weathered that they are decomposing back into their original components.

Table 3
Unit Descriptions for Generalized Post Oak Creek Stratigraphic Profile

Unit	Maximum Observed Thickness	Description
C	50 cm	Fine silty sand
B	44 cm	Fine silty sand, Soil 2 developed on top (530 ± 70 yr B.P.)
A_2	200 cm	Medium to coarse silty sand, Soil 1 developed on top (680 ± 80 yr B.P.)
A_1	50 cm	Poorly sorted granitic and sandstone cobbles in silty sand matrix, cobbles less than 10 cm in diameter

The first fluvial event recorded in the study area is characterized by Unit A, which consists of two subunits: A₁ and A₂. Unit A₁ consists of a layer of mixed sandstone and granite cobbles in a silty sand matrix that directly overlies the highly weathered Permian bedrock. This unit occurs only in Profile 3, on the southern side of the stream valley. It is hypothesized that the unit was created when a fluvial event pulled up chunks of the underlying sandstone bedrock, mixing them with the granitic cobbles and sand it was already transporting, and later depositing the mixture. The gravelly unit grades gradually into overlying Unit A₂, a silty sand unit that, in some places, measures up to 200 cm thick. An extensive soil profile measuring up to 175 cm thick, here designated as Post Oak Creek Soil 1 (S1), is developed atop Unit A₂, indicating a long period of stability after the deposition of Unit A. The upper portion of the soil dates from 680 ± 80 yr B.P. (Beta 76097). On the southern side of the stream, Unit A continues to the modern-day surface indicating a potentially time-transgressive soil. The possibility exists that Unit A represents a distance-transgressive point bar or crevasse-splay deposit left by the ancestral Post Oak Creek.

On the northern side of the stream, S1 soil development was interrupted at some point by a period of erosion and deposition. Unit B, a silty sand unit similar to Unit A₁, unconformably overlies Soil 1. This unit may have been created when the stream laterally migrated toward the northern part of the floodplain, removing part of Unit A₁ and S1 and depositing Unit B atop the remainder. The upper portion Unit B is discontinuously developed into a soil profile, which has been designated Post Oak Creek Soil 2. This soil dates from 530 ± 70 yr B.P., indicating a rapid sedimentation rate after S₁ was truncated, perhaps the result of a single depositional event. The discontinuous nature of Soil 2--that is, it did not appear to be present in all portions of Profile 4--seems to indicate a period of extensive erosion. The erosion was followed by the deposition of Unit C, another silty sand unit that extends to the surface; confusingly, it appears to grade gradually into underlying Unit B at some points, without the interceding unconformity and Soil 2. The upper portion of Unit C bears no evidence of soil development, indicating that it is either very young or has suffered extensive disturbance that has not allowed proper soil development.

The modern channel system cuts down through all the soil layers to bedrock, and appears to be relatively recent. Modern channel fill consists of a mixture of coarse sand and granite cobbles, up to 30 cm in diameter, which seem to represent reworked point bar deposits. In some areas, more than one channel is present, indicating that Post Oak Creek occasionally takes the form of a braided or anastomosing stream. These multiple channels are often separated by gravel bars.

Discussion

Using the data and observations from this and other studies as a guide, the following paragraphs will attempt to interpret the Quaternary geologic history of this portion of Fort Sill in a manner consistent with the information that is currently available.

At present it is impossible to reconstruct in any detail the geologic history of this area for the Pleistocene and early Holocene due to a lack of data. Based on data from other studies done in this region (Madole 1988), it is likely that there were alternating cycles of erosion and deposition during the Pleistocene associated with the climatic and sea-level changes caused by the waxing and waning of glacial cycles.

Some Pleistocene deposits are exposed to the northeast in the area of Brown's Creek and in the area between East Cache and Beef creeks. However, the Pleistocene deposits that are exposed apparently pre-date 80,000 years B.P., and so were stable surfaces well prior to the arrival of man in this region. Remnants of these and other younger Pleistocene-aged deposits may be buried under younger Holocene-aged floodplain sediments, but it is doubtful that the thickness of Quaternary sediment above bedrock would

have allowed any considerable amount of Pleistocene material to be preserved in the study area. All that is known for certain is that there was deposition in portions of eastern Fort Sill during the Pleistocene, particularly along the ancestral East Cache Creek to the east, and that these sediments have been either removed by erosion or deeply buried in the areas examined in this study (Shanabrook 1993).

It is also difficult to say much about the types of depositional environments active in the study area during the Early and Middle Holocene. Given the three radiocarbon ages acquired for these sediments, the deposits observed along West Cache and Post Oak creeks appear for the most part to be younger than 1,000 or 2,000 yr B.P., or late Holocene in age. Previous investigations in the Ketch Creek area tend to indicate that some Middle or Early Holocene deposits survive at least along Ketch Creek (Shanabrook 1993). However, the limited depth to bedrock in most of that portion of the study area (3 m to 5 m on average) and the narrowness of the stream valleys in many areas would argue against the burial and preservation of earlier sedimentary units since these valleys would tend to be periodically "swept clean" by periods of erosion or increased stream channel downcutting and migration. It is likely that these earlier deposits will exist only as small floodplain remnants or inset terraces located along valley margins buried under younger sediments.

The Late Holocene deposits observed in the study area appear to have been laid down by low-sinuosity, meandering streams (Cant 1982:119). As noted previously, there is considerable evidence of this in much of the study area: that is to say, there is some evidence of lateral migration of differing facies and the amount of coarse-grained material (sand and gravel) is much greater than the finer-grained sediments present (see Figure 4 in particular). Depositional styles of this nature would not seem unusual given the small thickness of sediment above bedrock and the ready supply of coarse clastics available from the granite and sandstone outcrops that surround it on all sides. This evidence supports the view that all of the sediment observed along both creeks is late or very late Holocene in age, probably being less than 2,000 years and in many cases less than 1,000 years old. This would in turn imply that these creek valleys have undergone a continuous cycle of rapid erosion and deposition throughout the Holocene, as fresh deposits of alluvium are laid down and older deposits are eroded and reworked.

SUMMARY AND ARCHEOLOGICAL IMPLICATIONS

Shanabrook (1993) has provided a cogent summary of the Quaternary geological history of Fort Sill, as expressed in the sediments observed along Ketch, Medicine, and East Cache creeks. His general summary will be followed here, but will be tailored for discussion of West Cache and Post Oak creeks, both of which are located in the western half of the fort. Although intended to cover only the three eastern creeks previously mentioned, his discussions and conclusions remain useful in a regional sense and, given the understanding of the data that now exist, are specifically applicable to the data gathered from Post Oak and West Cache creeks.

Although no sediments of known Pleistocene age were observed for either of the two creeks in the study area, apparent Holocene-age sediments were present in abundance. The Late Holocene saw continued slow aggradation in the valley of both creeks, most likely as a result of braided or low-sinuosity meandering streams in the narrower portions of the valleys and by more sinuous meandering streams in the wider portions. Episodic periods of erosion and changes in deposition rates affected sedimentation in both valleys to one degree or another. The most recent portion of the Holocene has seen the onset of drier conditions, which has apparently caused the pronounced entrenching of the stream channels and potentially has changed the balance between the rates of erosion and deposition.

The Quaternary depositional and erosional history of the floodplains in the study area has a number of important implications for the location and preservation of cultural sites. The most important of these is that there is a good likelihood of finding single component, sealed, buried sites in the channel belt deposits laid down by each creek. The presence of two or three paleosols indicate the existence of ancient stable surfaces dating from different times in the Late Holocene, and suggest that further exploration of the floodplain would probably reveal additional prehistoric sites. The difficulty that will be posed by both of these valleys is that although the potential for buried archeological deposits may be very good, these deposits will be relatively difficult to locate because of the lack of surface expression of the potential habitation sites and because of the relatively great depth (1-2 m) to which some of the deposits may be buried. This problem is not unusual for the deeply buried sites, which are difficult to locate even in the best of circumstances, but the lack of surface features used as reliable guides for locating the less deeply buried sites is a severe handicap. Given the size of the floodplains in the study area and the relatively small size of the facies belt containing the most favored occupational sites (i.e., the active channel belt) and the rate at which this belt could shift with time, predicting the location of areas that might have a higher probability for buried cultural resources would be nearly impossible with the data that are available. Only acquisition of additional data in the form of sediment profiles and more radiocarbon ages will help alleviate this problem.

CHAPTER 6

RESEARCH RESULTS

by
Gathel M. Weston, Kimberly L. Kane, and Floyd B. Largent, Jr.

A total of 17,068 acres was examined during the 1992 survey of selected areas of Fort Sill (see Figure 1). During the course of the survey, 77 sites were located. Fourteen of these sites were previously recorded sites, consisting of five sites with historic components, and twelve with prehistoric components. A total of 63 new sites was recorded, with 35 exhibiting a historic component, and 33 sites exhibiting a prehistoric component.

SITE DESCRIPTIONS

Survey Area 1

Survey Area 1 consists of a 1,300-acre parcel located at the southern edge of the West Range of Fort Sill (Figure 8). Topography of the survey area is primarily level to gently rolling plains, with two low hills located at the western end. Near surface bedrock is granite and rhyolite porphyry conglomerate with remnants of limestone and dolomite forming the base of the low hills at the western end of the area. Soils in the area are dominated by the Foard-Slickspots complex soil series with small areas of Lawton loam, Vernon soils, and limestone cobbly land. Limited areas of alluvial soils (Port loam, Port-Slickspots complex, and breaks-alluvial land complex) are found along East Branch Wolf Creek, Pecan Creek, and an unnamed creek at the western end of the survey area. Intermittent upland drainages and small creeks form the only waterways within the survey area. The natural vegetation within Survey Area 1 consists of mixed grasses, dispersed mesquite trees, and limited gallery forests along East Branch Wolf Creek and Pecan Creek.

The 1977 archeological survey conducted by the Museum of the Great Plains covered approximately 640 acres that are contiguous with Survey Area 1, resulting in the location of one site, 34Cm-306, which is a lithic scatter dated to the Plains Village period. This site extends into the current survey area and was relocated. No other previously recorded sites are located within the survey area and only one new site was recorded, site 34Cm-488, a historic homestead. In addition, two localities were recorded within this area, locality 92-230 and locality 92-121, both related to military activity (see Appendix C).

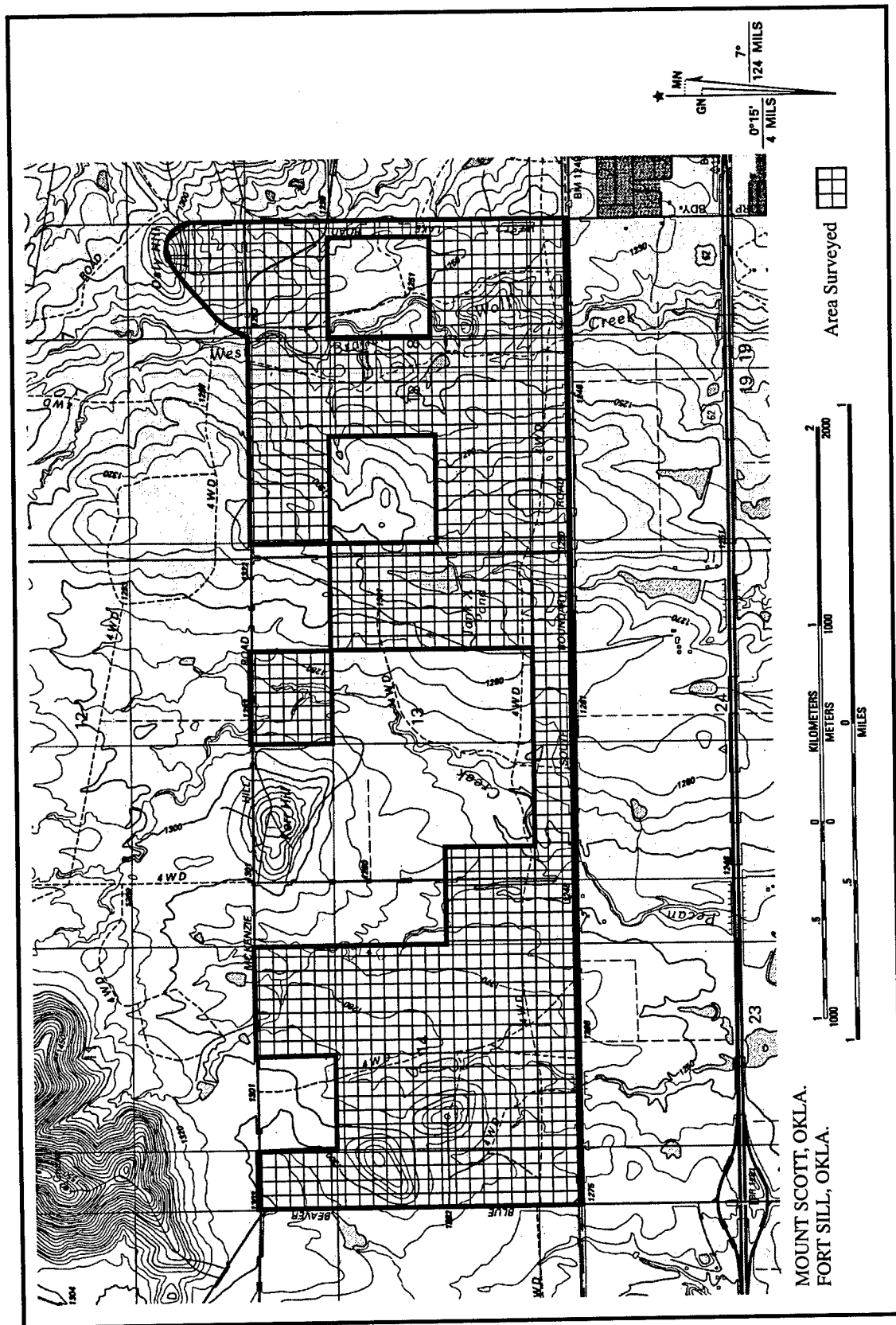


Figure 8. Location of Survey Area 1 within the Fort Sill Military Reservation.

34Cm-306 (92-127)

This site is located on a level upland rise east of West Branch Wolf Creek, at an elevation of 387 m (1,270 ft) above mean sea level (amsl). Soil at this location is mapped as Foard-Slickspots complex; the soil depth is expected to be 5 cm to 30 cm (USDA, SCS 1970). Vegetation observed in the area of the site consisted of post oak, mesquite, mixed grasses, wildflowers, and sunflowers.

Site 34Cm-306 was originally recorded as a moderate-sized lithic scatter containing diagnostic artifacts dating to the Plains Village period with a total of 94 lithic artifacts observed and collected from disturbed portions of the site (Ferring 1978:203-204). Material collected included two Fresno arrow points, 15 other tools, and associated lithic debris (Ferring 1978:384-385). No historic artifacts were recorded at that time. It was observed that the site had been extensively disturbed from vehicular traffic, firebreak maintenance, and erosion. The presence of intact archeological deposits was not documented.

The current survey revealed the presence of only 10 lithic artifacts on the surface of this site, as well as a like number of historic artifacts. All cultural materials observed were found either on the unimproved dirt road that crosses the site, or on the eroded surface immediately bordering the road. No material was observed within the plowed firebreak that is located north of the site area, although artifacts were collected from this area when the site was originally recorded. Two modified flakes and a biface fragment were the only lithic tools observed. The historic material consisted of glass fragments, whiteware fragments, and recent military debris. The glass and whiteware may be associated with site 34Cm-488 (92-128), a historic farmstead located 300 m northeast of the site. No features or foundation remnants were observed in this area to indicate that any historic structures were ever located within the site boundaries.

Eight shovel tests were excavated across the site area. No cultural material was observed in any of these test units. Current site area is estimated at 4,900 m² (Figure 9), compared to a site area estimate of 6,000 m² when the site was originally recorded. Daly Hill, a very active military observation point, is located to the northeast of this site. One of the primary access roads to the hilltop crosses the site area, resulting in heavy disturbance to the site. In addition, the site has been disturbed by a firebreak that crosses east to west immediately north of the site, within an area originally included as part of the site.

Prehistoric Artifacts

A biface fragment, two unifacially modified flakes, and a tested rhyolite cobble were collected from this site, while six pieces of lithic debris were observed on the ground surface but not collected.

The rhyolite biface fragment is fractured in three places, with only two portions of opposing edges remaining. The shape of this piece suggests that it may represent a projectile point preform. Its dimensions are 2.6 cm x 2.2 cm x .8 cm; the weight is 4.75 g.

The two thin flakes collected from 34Cm-306 have been extensively reworked. One flake has one margin reworked into a concave edge, while the second flake exhibits three margins reworked into straight edges. The two lateral edges of this second piece form near right angles with the distal edge. Both flakes exhibit moderate use wear and were fractured after modification; both are made from a fine-grained, opaque chert with a dull to satin luster and mottled white to light gray color. The first artifact measures 2.3 cm x 1.8 cm x .3 cm, with a weight of 1.35 g, while the second measures 2.0 cm x 1.7 cm x .2 cm and weighs .9 g.

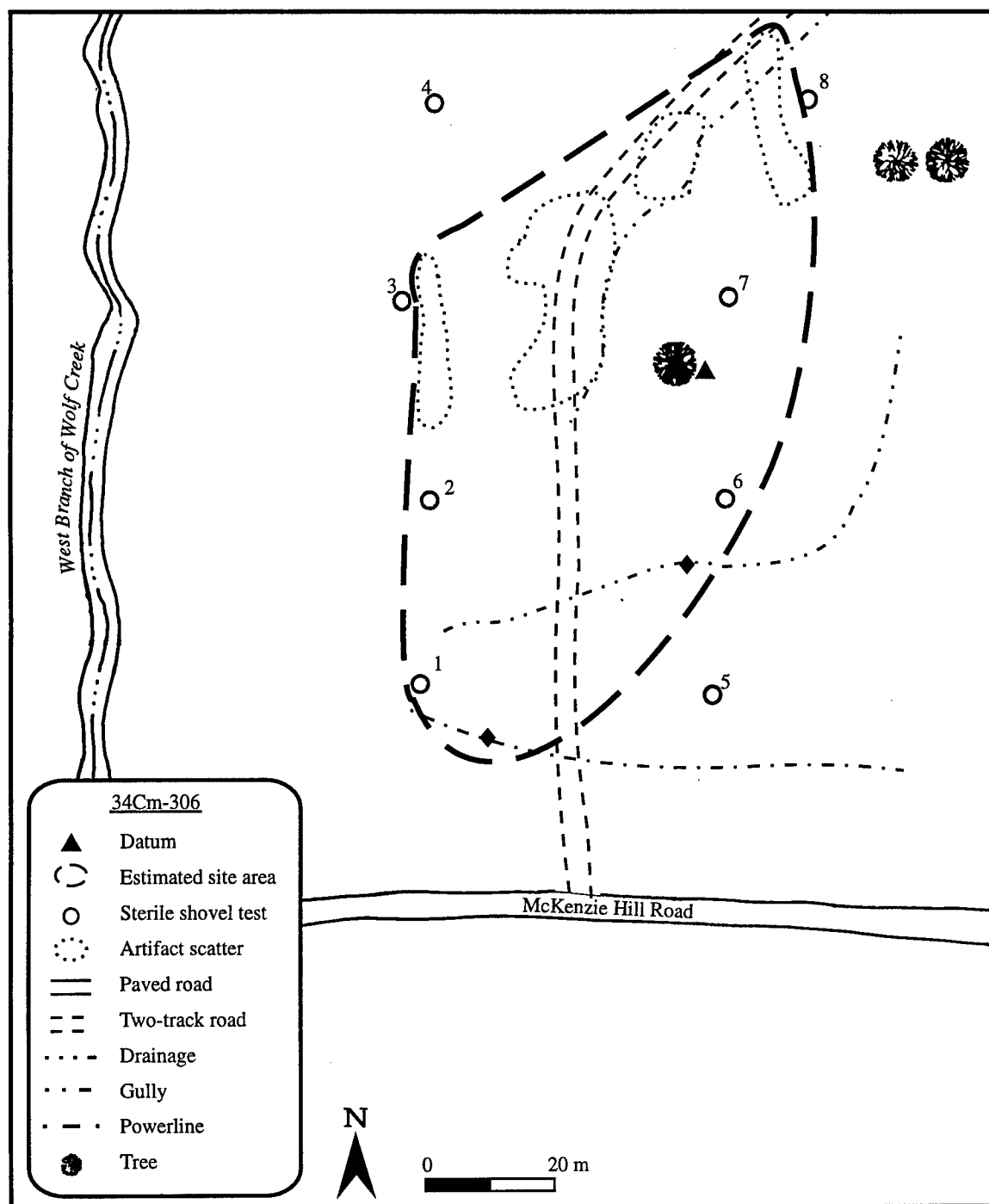


Figure 9. Plan map of site 34Cm-306 (92-127).

The rhyolite cobble has three large flakes removed from one end. This is typical of the artifacts classified by James Shaeffer (1959) as a "chopper." Since no distinct striking platforms, bulbs of percussion, or usewear can be discerned on this item, its cultural origins are questionable. It measures 9.7 cm x 9.7 cm x 4.6 cm and weighs 527.5 g.

Historic Artifacts

A total of four artifacts was collected from the surface. These artifacts included a white-whiteware ceramic fragment (1890-1990), a large bolt, one clear glass fragment, and a hand grenade firing pin.

Summary

There is little evidence that intact archeological deposits remain at this site; there is, in fact, little evidence that it was ever more than a surface scatter. When the site was originally recorded, a moderate density of lithic artifacts was observed in an extensively disturbed area. This site is now classed as a very low density lithic scatter and is situated within an area that has suffered from continuing disturbance related to firebreak maintenance and military traffic. The newly recorded historic artifacts may represent further disturbances to the site from earth-moving operations.

Based on the poor site condition, lack of subsurface deposits, and sparsity of material, it is recommended that this site not be considered for further testing nor for inclusion in the NRHP.

34Cm-488 (92-128)

Site 34Cm-488 consists of a historic farmstead, situated at the southern foot of Daly Hill. Located just west of West Branch Wolf Creek, the site is at an elevation of 390 m (1,280 ft) amsl. Soil is mapped as Foard-Slickspots complex; soil depth is expected to be between 5 cm and 30 cm. Vegetation observed in the area of the site consisted of juniper, post oak, cottonwood, black walnut, mixed grasses, wildflowers, and sunflowers.

This site consists of a storm cellar, foundations, a well, and a 21-x-25-m limestone quarry (Figure 10). A small number of historic artifacts is scattered throughout the site area. The foundation measures 9 m (E/W) by 7 m (N/S) and is formed of two adjacent concrete slabs. A few sill bolts are present on each slab. The southern slab is complete; however, the northern slab has begun to deteriorate severely, possibly due to vehicular traffic crossing its northwestern edge. Located next to the foundation is a large fragment of concrete and limestone conglomerate.

The storm cellar is built into Daly Hill. Inside measurements of the cellar are 285.5 cm (N/S) by 317 cm (E/W). The outside height is 227 cm and the minimum height inside is 177 cm. The doorway measures 87 cm x 185 cm. The walls are constructed of concrete and limestone, with a concrete slab floor and arched concrete roof.

The feature that has been identified as a well is 25 m west of the cellar. This feature exhibits a lipped concrete and limestone slab. One of the concrete lips has a metal handle embedded in it, while two of the sides are broken and crumbling. The interior of this feature is filled with modern trash, making positive identification of this feature's function difficult.

The limestone quarry is located approximately 35 m east of the storm cellar. No historic artifacts were associated with this quarry, but recent military trash and one unidentified piece of ordnance were observed in the quarry. The quarry is heavily overgrown and appears not to have been utilized for several decades.

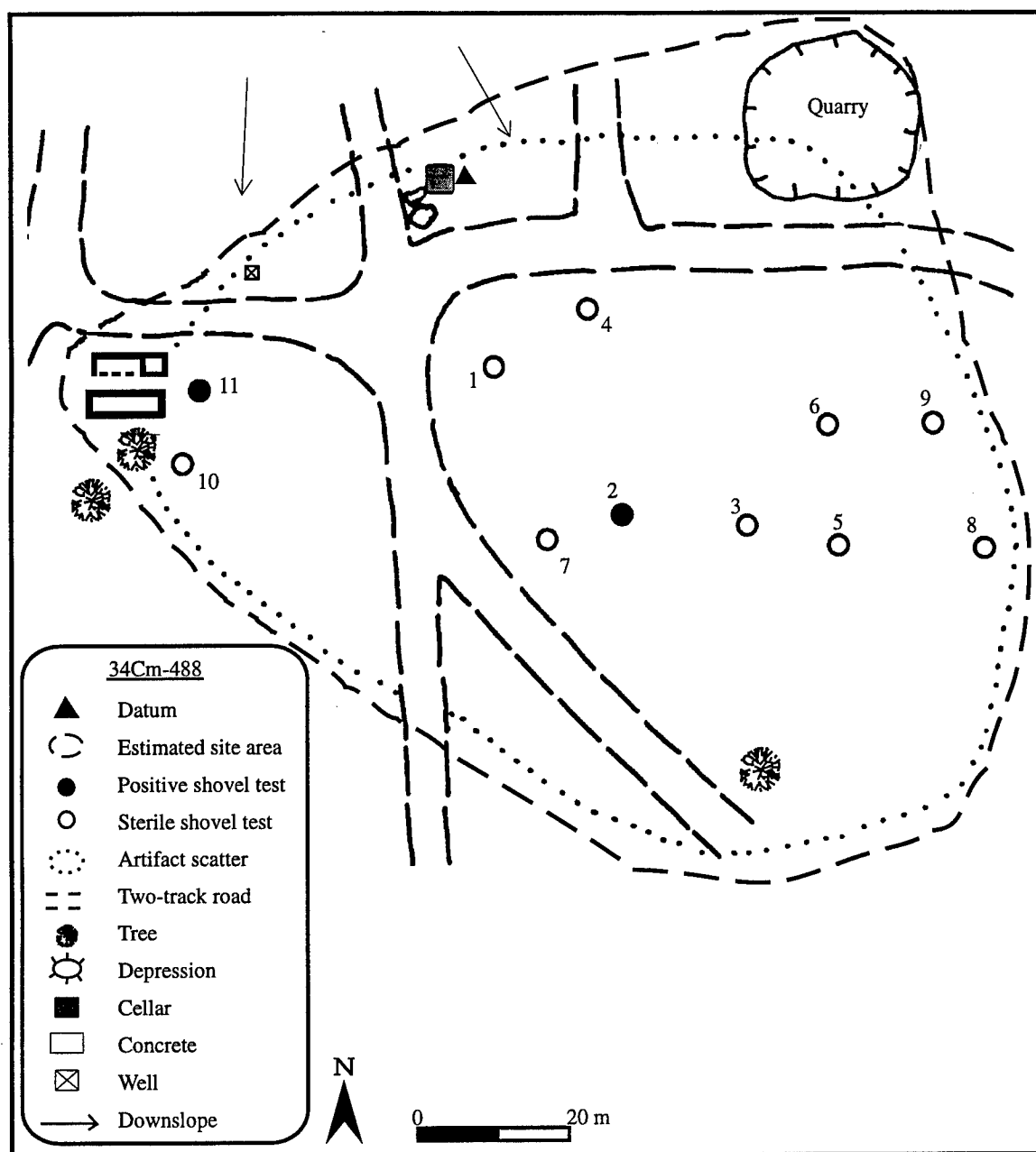


Figure 10. Plan map of site 34Cm-488 (92-128).

Eleven shovel tests were excavated at this site, two of which yielded historic artifacts consisting of wire nails, glass, window glass, and whiteware. Maximum observed depth of the cultural deposits is 30 cm. No shovel testing was done north of the cellar because no sediments are present on the slope of Daly Hill.

Most of the surface artifacts observed at this site were in the dirt roads that crisscross the site area. Only a light scatter of artifacts was observed in the less disturbed southern portion of the site. Aluminum cans, MRE packaging, two old tires, communication wire, tank tread rubber covers, soda bottles, and other modern trash were also observed in the site area.

Historic Artifacts

Fourteen historic artifacts were recovered from the surface and two shovel tests. Surface material consisted of burned ironstone ceramic fragments (1840-1910). The two shovel tests yielded one white-ware fragment (1890-1990), a manganese solarized bottle fragment (1880-1920), wire nails (1880-1990), and a window pane fragment.

Summary

This site has suffered considerable disturbance due to the intense military training that is conducted in this portion of Fort Sill. After the initial recording of this site, it was revisited by supervisory personnel, at which time it was discovered that the site datum tag had been removed and recent military trash left deposited within the storm shelter. This demonstrates not only the real and potential impacts to sites located on the Fort Sill Military Reservation, but also the need to educate military personnel regarding the historic preservation laws that govern the use and preservation of historic sites, buildings, and structures.

This site has intact, although damaged, architectural features and observed subsurface deposits. Further testing and archival research is necessary in order to evaluate fully this site's potential for inclusion in the NRHP.

Survey Area 2

Survey Area 2 is a 2,177-acre parcel of land located at the southwestern edge of the West Range, which is situated at the southern edge of the Wichita Mountains (Figure 11). The area consists primarily of level to gently rolling plains, but the central portion of the area contains several outliers of the Wichita Mountains. While these outliers do not reach as great an elevation as the main body of the mountains, they are as steep and rugged as the larger mountains to the north and have a similar vegetation community.

Soils on the plains consist of, in order of coverage, Foard-Slickspots complex, Foard silt loam, granite cobbly land, and Lawton loam. The outliers of the Wichita Mountains contain areas of rock land, stony rock land, and granite outcrop. Port loam, Port clay loam, and Port-Slickspots complex are found along West Branch Blue Beaver Creek and Crater Creek. Other than the ubiquitous small upland drainages, these two intermittent creeks are the only waterways in this area.

Vegetation on the plains is composed of mixed grasses with dispersed stands of mesquite. Moderately dense gallery forests border both Crater and West Branch Blue Beaver creeks, and moderately dense to dense Cross Timber woodlands ring the outliers of the Wichita Mountains.

There are two previously recorded sites known for this survey area: prehistoric sites 34Cm-75 and 34Cm-323. Both of these sites were relocated, and an additional seven sites and 12 localities were recorded (see Appendix C). Three of the new sites, 34Cm-445, 34Cm-461, and 34Cm-462, date to the prehistoric period; three sites, 34Cm-441, 34Cm-446, and 34Cm-464, are historic; and site 34Cm-460 contains both prehistoric and historic material.

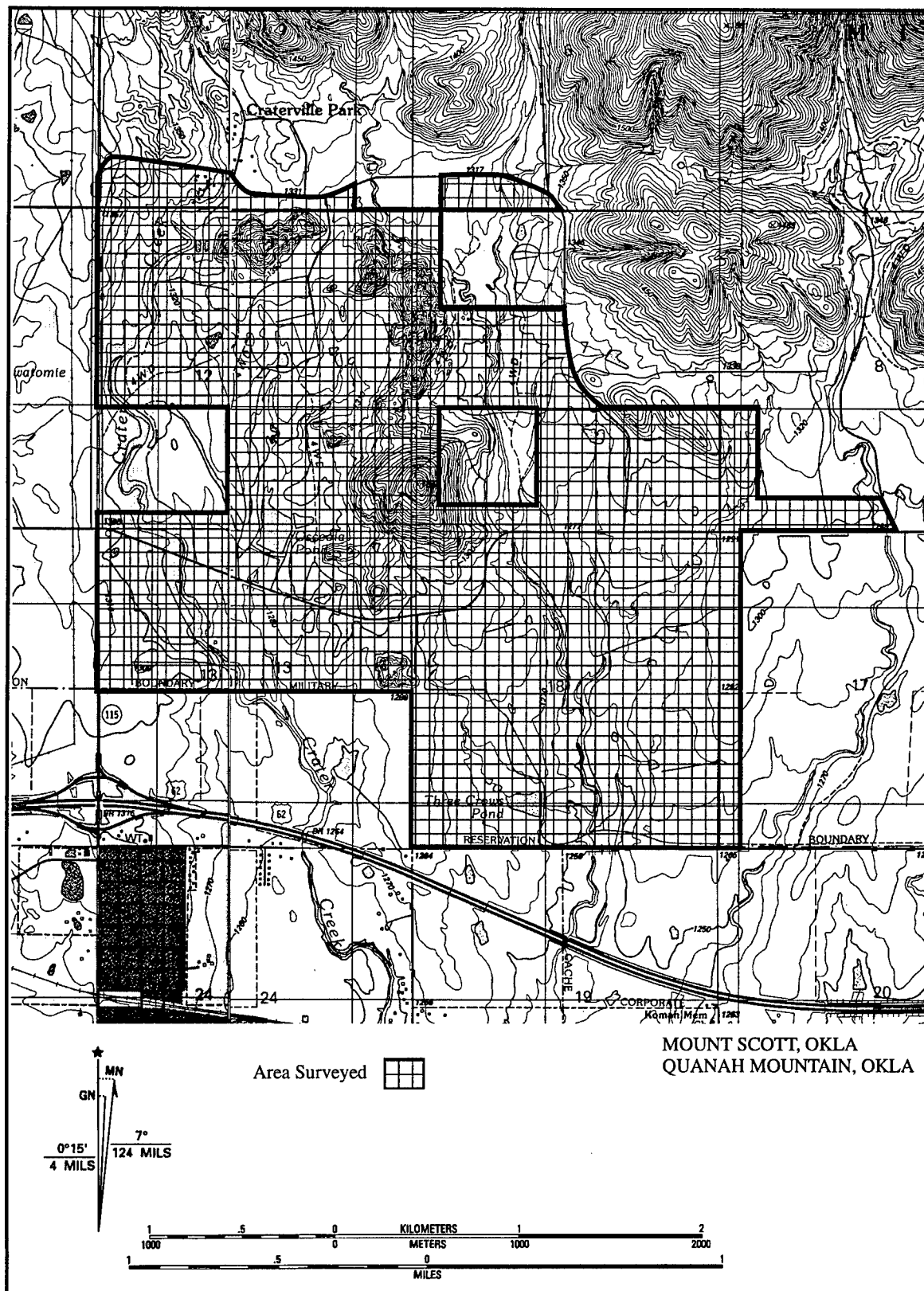


Figure 11. Location of Survey Area 2 within the Fort Sill Military Reservation.

ft) amsl. The soil type is mapped as granite cobbly land with little or no surface sediments expected. The actual depth of surface sediments was observed to be between 3 cm to 15 cm. Vegetation observed in the area of the site consisted of Johnson grass, blue grass, Indian rice grass, post oak, and juniper.

The slope is marred by several unimproved dirt roads running east to west, following the contours of the ridge (Figure 13). Ground visibility ranges from approximately 30 percent in grassy areas to 100 percent in eroded areas. There is an almost complete absence of soil on the slope and ridge crest, the land surface being primarily decomposed granite gravel.

Twenty-five to 30 flakes and associated debris were observed on the ground surface. A quartz Perdiz point, one biface tip fragment, and a small amount of lithic debris were collected. Raw materials include quartz, Ogallala quartzite, white chert, black chert, and rhyolite. Four shovel tests were excavated at the site, but no cultural material was recovered from any of the test units. Site area is estimated at 5,000 m².

Prehistoric Artifacts

One Perdiz point, a biface tip fragment, two unifacially modified flakes, and 10 pieces of lithic debris were collected from the surface of this site. Chert, Ogallala quartzite, and quartz lithic debris were observed on the surface but not collected.

The Perdiz point was manufactured from milky, opaque quartz (5YR 8/1) and is missing approximately 3 mm of the tip and one barb (Figure 14). The specimen is relatively thick and has a series of step fractures across one face. The dimensions are 2.5 cm x 1.6 cm x .6 cm, with a weight of 1.85 g. The biface tip fragment is fashioned from Ogallala quartzite and measures 1.2 cm x 1.0 cm x .5 cm, with a weight of .35 g.

A tertiary flake of Alibates chert has been unifacially retouched on both lateral edges. The distal end of the flake apparently was snapped off after modification. Slight use wear is observable. This tool's measurements are 1.8 cm x 1.6 cm x .2 cm, with a weight of .6 g. The second unifacial tool consists of a thick flake with cortex visible at one end; the opposite end has been snapped off. It is impossible to tell if the cortex was the striking platform. The lateral edges have been steeply chipped and exhibit moderate edge wear. The raw material type is a Tecovas-like chalcedony, and the dimensions are 2.0 cm x 1.4 cm x .5 cm; the specimen weighs .65 g.

The collected lithic debris consists of one primary flake, one secondary flake, one tertiary flake, four flake fragments, and three angular fragments. Four of these items fall into the 1 to 2 cm size range, five fall into the 2 to 3 cm range, and one is between 3 and 4 cm in length. Raw material types include three pieces of Edwards chert, one piece of Tecovas-like chalcedony, two pieces of Ogallala quartzite, two pieces of quartz, and two pieces of unidentified chert. All three pieces of Edwards chert retain rough cortex, indicating a nonriverine source for this material.

Summary

No intact subsurface archeological deposits were observed at this site, and none are believed to exist. Artifact density is low to moderate and disturbance has been heavy and widespread. This site offers little in the way of research potential and is not recommended for inclusion in the NRHP.

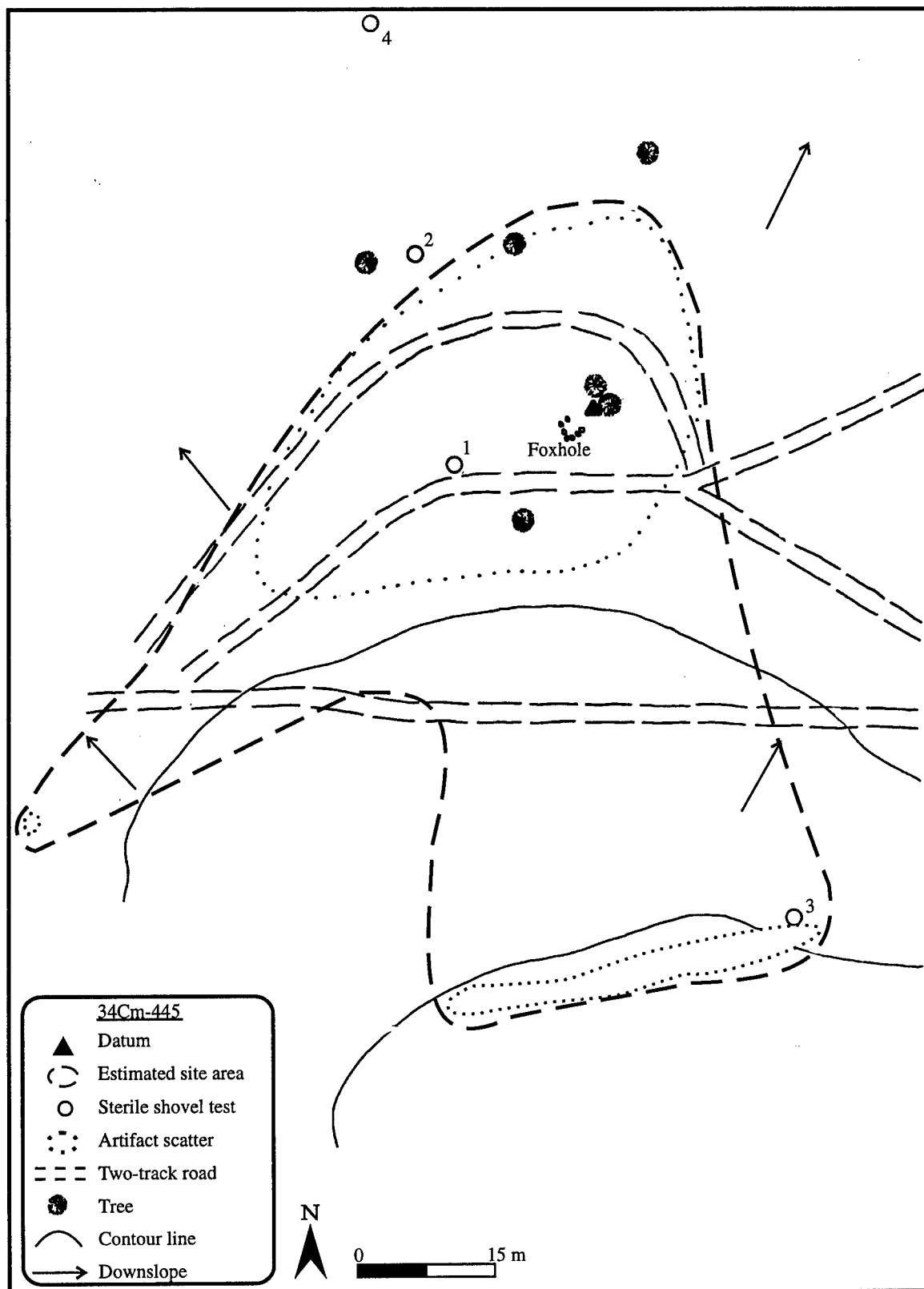


Figure 13. Plan map of site 34Cm-445 (92-69).

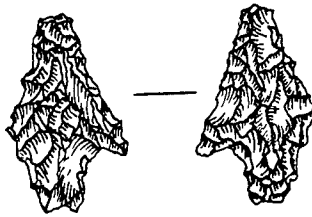


Figure 14. Diagnostic lithic artifact recovered from 34Cm-445 during the 1992 survey: quartz Perdiz point. (Scale 1:1)

34Cm-323 (92-70)

Site 92-70 was previously recorded as 34Cm-323. It was then characterized as an isolated burial eroding out of Crater Creek's east bank, associated with lithic scatter in the dirt road paralleling the creek. The burial was excavated and removed; no diagnostic artifacts were recovered during excavation or surface collection. The site is situated at an elevation of 396 m (1,300 ft) amsl; soil is mapped as Port loam. Vegetation observed in the area of the site consisted of post oak, pecan, cottonwood, Johnson grass, blue grass, Indian rice grass, prickly pear cactus, and poison ivy.

During the current survey, 10 shovel tests were excavated at 34Cm-323. One flake was found in a shovel test at a depth of 10 cm. A second shovel test recovered a metal bolt at a depth of 20 cm (indicating extensive disturbance), while an additional eight shovel tests were negative. In addition to the material recovered by shovel tests, six chert flakes were observed on the surface of the road. The current site area is approximately 900 m² (Figure 15).

Prehistoric Artifacts

Six pieces of chert debris were observed on the ground surface but were not collected. One unifacially modified chert flake was collected from this site, from Level 1 (0 to 20 cm below the surface [bs]) of Shovel Test 1. The flake exhibits unifacial modification of the proximal end and 5 mm of the adjoining lateral edges. Slight use wear is observable on the proximal end only. This item measures 2.3 cm by 1.5 cm by .25 cm, and weighs 1.2 g. The raw material is an opaque, medium gray, fossiliferous chert with a fine texture and satin luster, and closely resembles the Kay County variety of Florence Formation Chert.

Historic Artifacts

A single historic artifact, a large bolt, was collected from Shovel Test 9 at a depth of 20 cm bs. Although nondiagnostic, it is significant in that it was recovered from a provenience below that of the single subsurface lithic artifact collected, indicating that extensive disturbance has occurred.

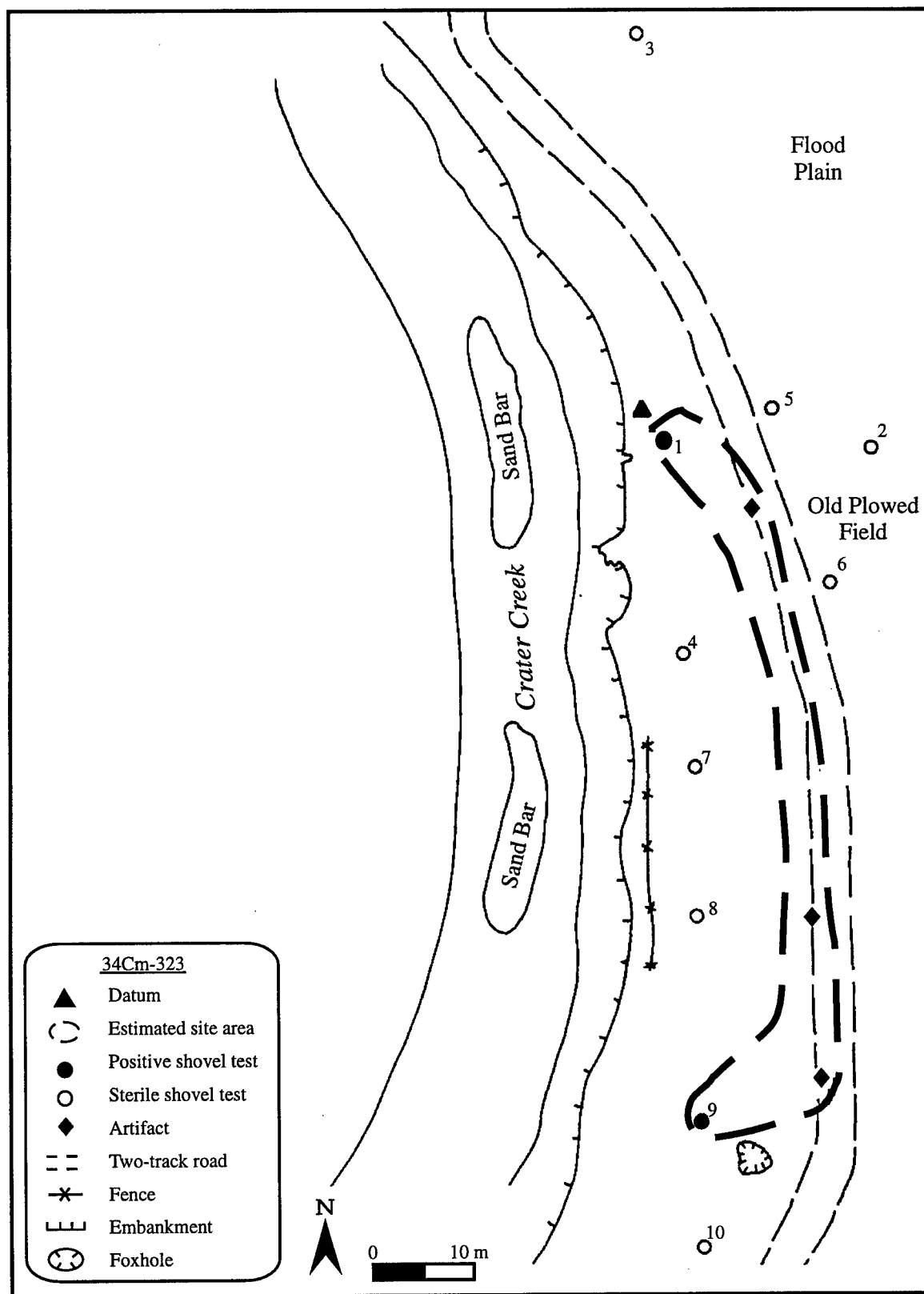


Figure 15. Plan map of site 34Cm-323 (92-70).

Summary

Any significant archeological deposits were removed from this site at the time the burial was excavated. Although there is some evidence of intact prehistoric deposits remaining at this site, the presence of a historic artifact recovered from a greater depth than prehistoric artifacts makes the integrity of any cultural deposits at this site suspect. This fact, coupled with the very low density of artifacts, suggests that the site offers little research potential. No further work is recommended at this site, and it is not recommended for inclusion in the NRHP.

34Cm-446 (92-71)

Site 34Cm-446 is a historic farmstead located on the west bank of Crater Creek, at an elevation of 396 m (1,300 ft) amsl. The soil is mapped as granite cobbly land. Vegetation observed in the area of the site consisted of post oak, juniper, cottonwood, cedar, pecan, Johnson grass, and blue grass.

The only intact features remaining at this site are (1) a semi-subterranean storm shelter; and (2) a cobble enclosed flower garden. Concrete structural debris is spread down the steep bank of Crater Creek and within the creek itself. This structural debris is too large to have been carried to its present location by water flow, and is in all likelihood the remains of a bulldozed farmhouse or outbuilding.

Ground visibility was low and no surface artifacts were observed in the site area; similarly, no artifacts were observed within the firebreak that passes the western edge of the site. Eight shovel tests were excavated at this site, two of which yielded nails and window glass at a depth of 10 to 20 cm bs. Site area is estimated at 3,135 m² (Figure 16).

Historic Artifacts

Historic material recovered from two positive shovel tests consisted of two wire nails (1880-1990), one cut nail (1840-1900), and two window glass fragments.

Summary

There is evidence of intact subsurface archeological deposits at this site, as well as intact features. Further testing and archival research is needed in order to evaluate fully this site's potential for inclusion in the NRHP.

34Cm-460 (92-91)

This site is located on the western first and second terraces of Crater Creek. The first terrace contains a historic dump related to Craterville Park (1920s to 1950s), while the upper, second terrace contains a post-1950 military dump with a small prehistoric component. The site is located south of the military barracks that were recently constructed on the west banks of Crater Creek. The elevation of the site is 399 m (1,310 ft) amsl and the soil type is mapped as Port loam.

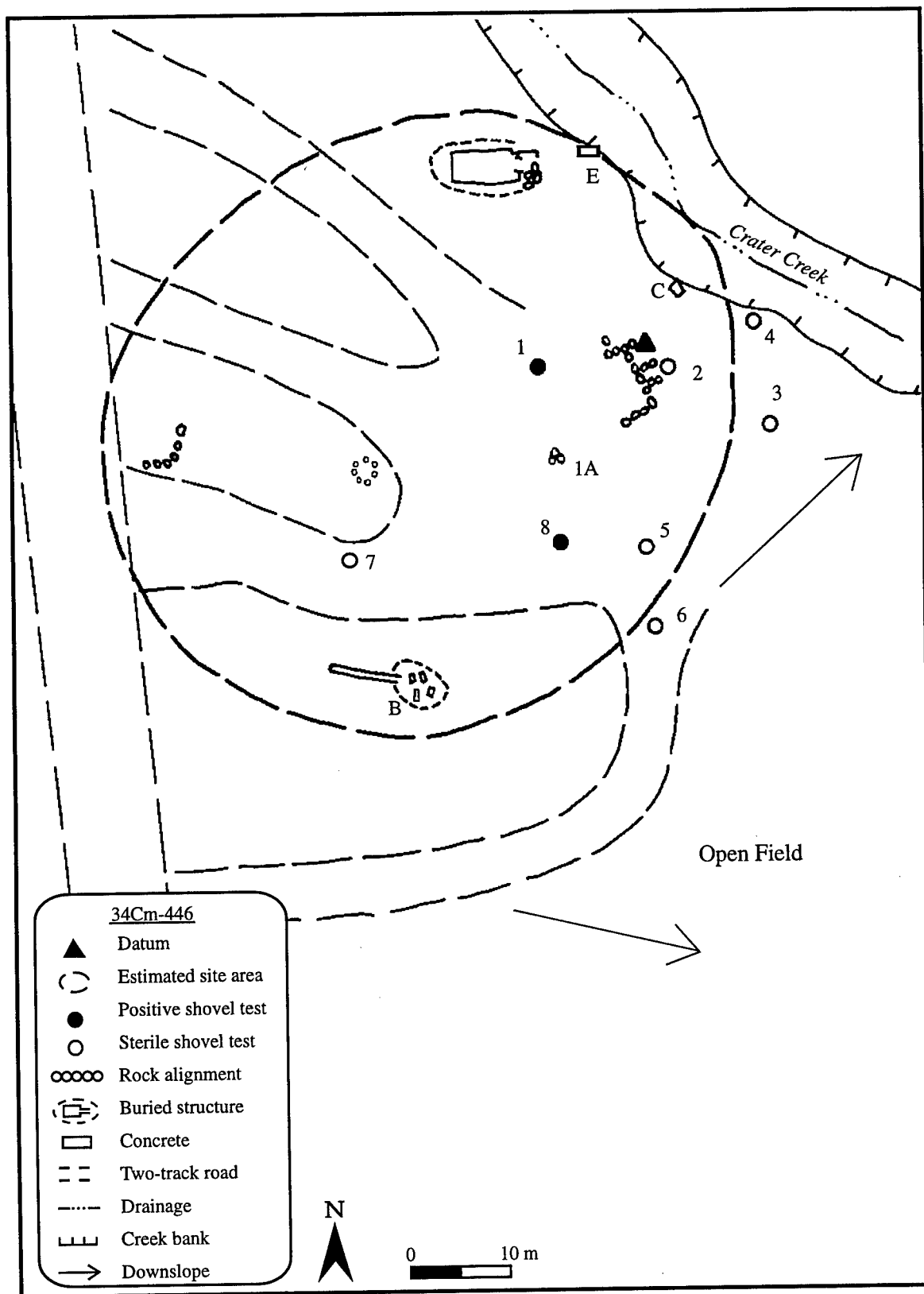


Figure 16. Plan map of site 34Cm-446 (92-71).

The lower dump has been slightly disturbed by bulldozer activity that has removed a small amount of surface sediments, revealing a collection of historic material including a metal toy race car, souvenir ceramic plates from both Craterville Park and the Holy City of the Wichitas, and other decorative knickknacks. Further disturbance from a small drainage cuts through the western end of this dump, creating a cutbank that has revealed historic material 25 cm to 55 cm bs. Four of the six shovel tests in this area recovered historic material to a depth of 40 cm. A compact layer of clay terminated four of the shovel tests at 40 cm bs or less, while two tests were excavated to 60 cm bs. These last two tests were at the site margins and were sterile below 20 cm bs. Surface observation and shovel tests indicate that this dump covers an area of approximately 1,000 m² (Figure 17).

The upper dump area is still an active disposal area. All historic material observed in this area is related to military activity. A small amount of prehistoric surface material, including a dart point base, was observed in a disturbed area at the terrace edge. Of the four shovel tests excavated in the immediate vicinity of this surface lithic material, units 10 and 14 yielded recent historic artifacts at a depth of 5 cm to 20 cm. Four additional shovel tests were excavated along the terrace edge. Prehistoric material was recovered from two shovel tests (units 3 and 6) at a depth of 20 cm, 30 m from the surface lithic material. No shovel tests were excavated in the northwestern portion of the site area due to a mound of trash and vegetative debris.

Prehistoric Artifacts

One projectile point fragment was collected from the surface of this site, and five flakes and four angular shatter fragments were collected from shovel tests. No additional lithic material nor other prehistoric material was observed on the surface of this site or in any shovel test.

Surface

A fragment of a dart point made from Alibates chert (SR 3/4) was collected from the surface of this site (Figure 18a). This specimen, split through the stem and fractured across the blade with only one shoulder and part of the smoothed stem remaining, shares some similarities with the Yarbrough point style.

Shovel Test 3, Level 1 (0 to 20 cm bs)

An Ogallala quartzite bifacial thinning flake, a silicified sandstone flake fragment, and two quartz angular fragments were collected from the first level of this shovel test. One of the sample is between 2 and 3 cm in length, and the other three are in the 1 to 2 cm size range.

Shovel Test 6, Level 1 (0 to 20 cm bs)

An Alibates chert flake fragment, two flake fragments and an angular fragment of other chert, and an angular fragment of quartz were recovered in the first level of this shovel test. All the material ranges between 1 and 2 cm in length.

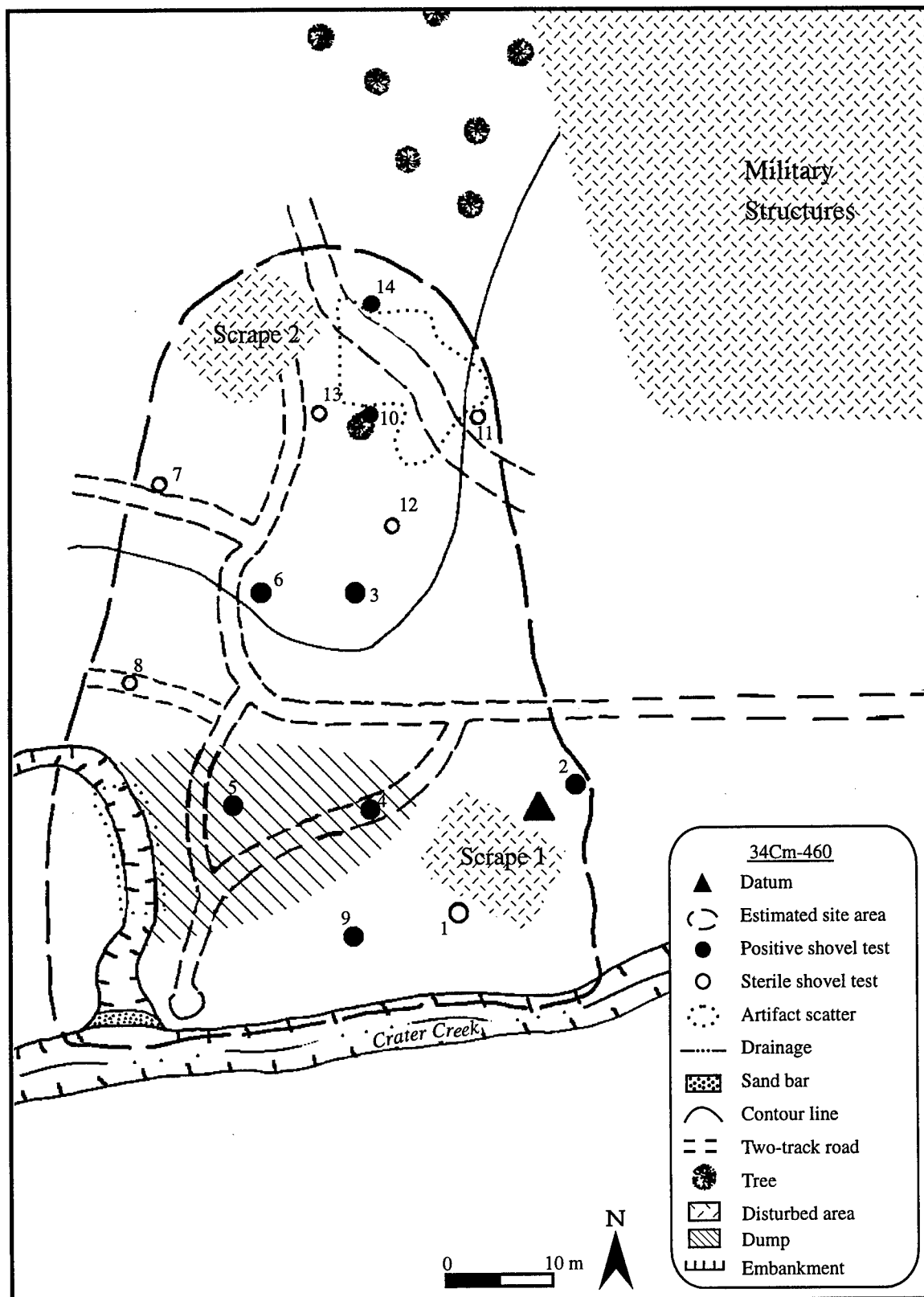


Figure 17. Plan map of 34Cm-460 (92-91).

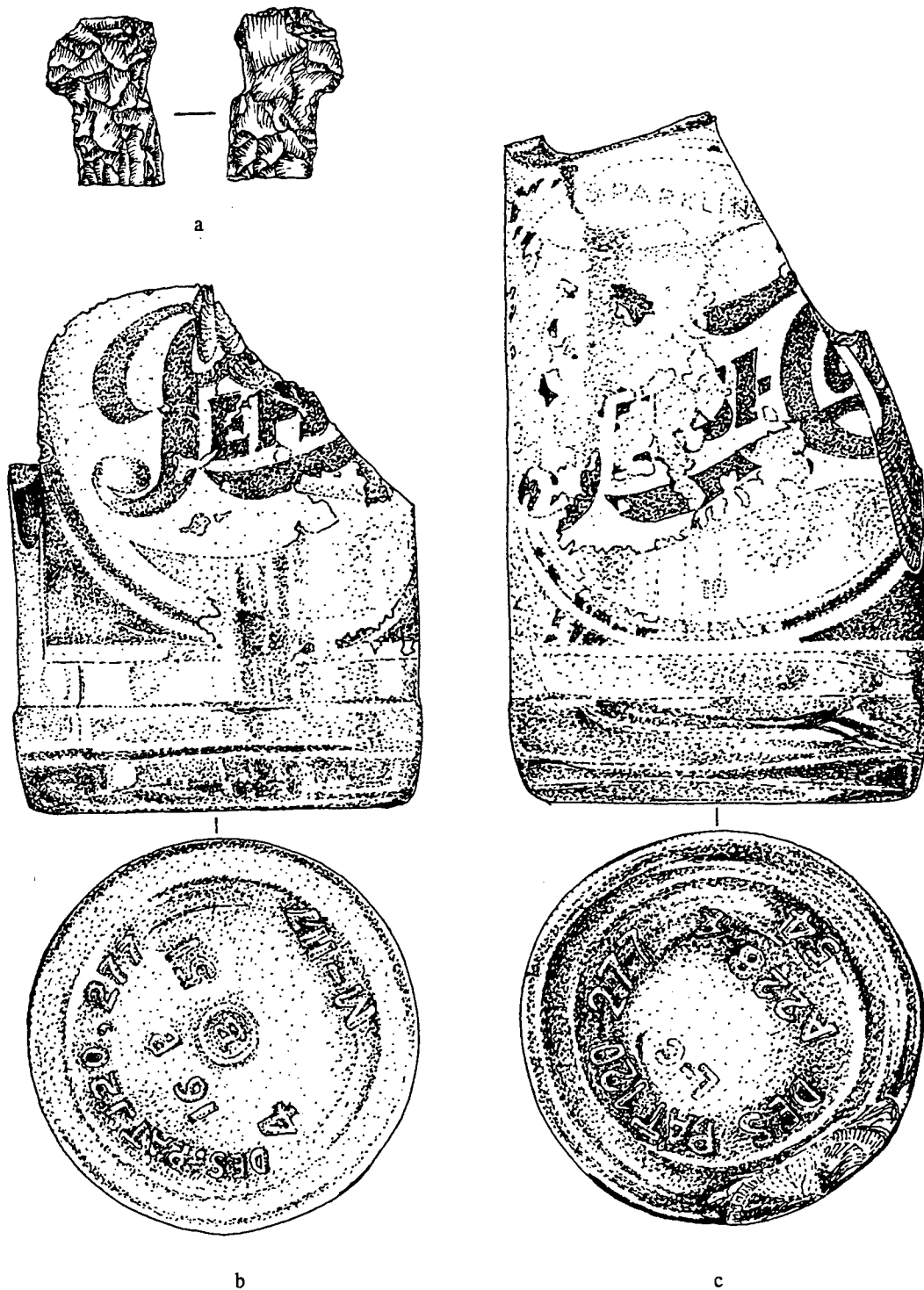


Figure 18. Artifacts recovered from 34Cm-460 during the 1992 survey: (a) Yarbrough-like Alibates chert projectile point base; (b) Pepsi bottle made by the Liberty Glass Company; (c) Pepsi bottle made by the Brockway Glass Company. (Scale 1:1)

Historic Artifacts

A large quantity of historic material was collected from the site surface. Wire nails (1880-1990) were the only historic material recovered from the six shovel tests executed at this site. Diagnostic glass artifacts collected from the surface consisted of an amber machine-made bottle (1910-1990), an Owens-Illinois bottle (1954-1990), a Liberty Glass Company bottle (1946-1954; see Figure 18b), and a Brockway Glass Company bottle (1925; see Figure 18c). Historic ceramics with the 'Holy City' inscription (1936-1990) included handpainted semi-porcelain fragments, transfer print white-whiteware fragments, and a bisque tile. Other diagnostic ceramics consisted of decalcomania decorated white-whiteware (1895-1950), handpainted white-whiteware fragments (1890-1990), and transfer print white-whiteware (1890-1990). Stoneware ceramics consisted of a bristol and cobalt blue exterior/bristol interior fragment (1890-1915) and a bristol exterior and plain interior fragment (1900-1990). Other historic material from this site included a brass pendant, a metal toy car, and a horseshoe. A Mean Beginning Date (MBD) of 1919 is estimated for the site from the diagnostic historic material collected from the surface.

Summary

Based on the presence of recent trash and general disturbance of this area, the prehistoric artifacts observed on the surface most likely represent a secondary deposit. They may have been brought in during a recent dumping episode or may have been brought to the surface during construction of a waterline that crosses the site area. However, the presence of buried lithic material in a less disturbed area of the site indicates that there may be intact prehistoric deposits in either a limited area or more deeply buried than shovel testing was able to reach. In either case, a more thorough investigation of this site is needed to fully determine the extent of prehistoric cultural deposits.

The lower portion of the site containing material related to Craterville Park appears to have a large quantity of material that is relatively undisturbed. No further testing is needed in this area; rather, preservation of this portion of the site is recommended, including erosion control.

34Cm-75 (92-92)

This site was originally recorded as site 34Cm-75, a low density scatter of historic and prehistoric artifacts. The site is located on the relatively level upland plain east of Crater Creek at an elevation of 402 m (1,320 ft) amsl. The mixed grass ground cover was sparse and ground visibility was excellent. The soil in this area is mapped as a boundary between Port loam and Foard-Slickspots complex. Survey results indicate that the site is within an area of Foard-Slickspots complex.

A very low density scatter of lithic debris was observed on the ground surface of this site. Although historic material was originally recorded at this site, the current survey did not observe any historic artifacts. Eight shovel tests were excavated at this site. One test only yielded a single quartzite flake from between 20 cm to 40 cm bs. No tools or diagnostic artifacts were observed at this site. Site area is estimated at 120 m² (Figure 19).

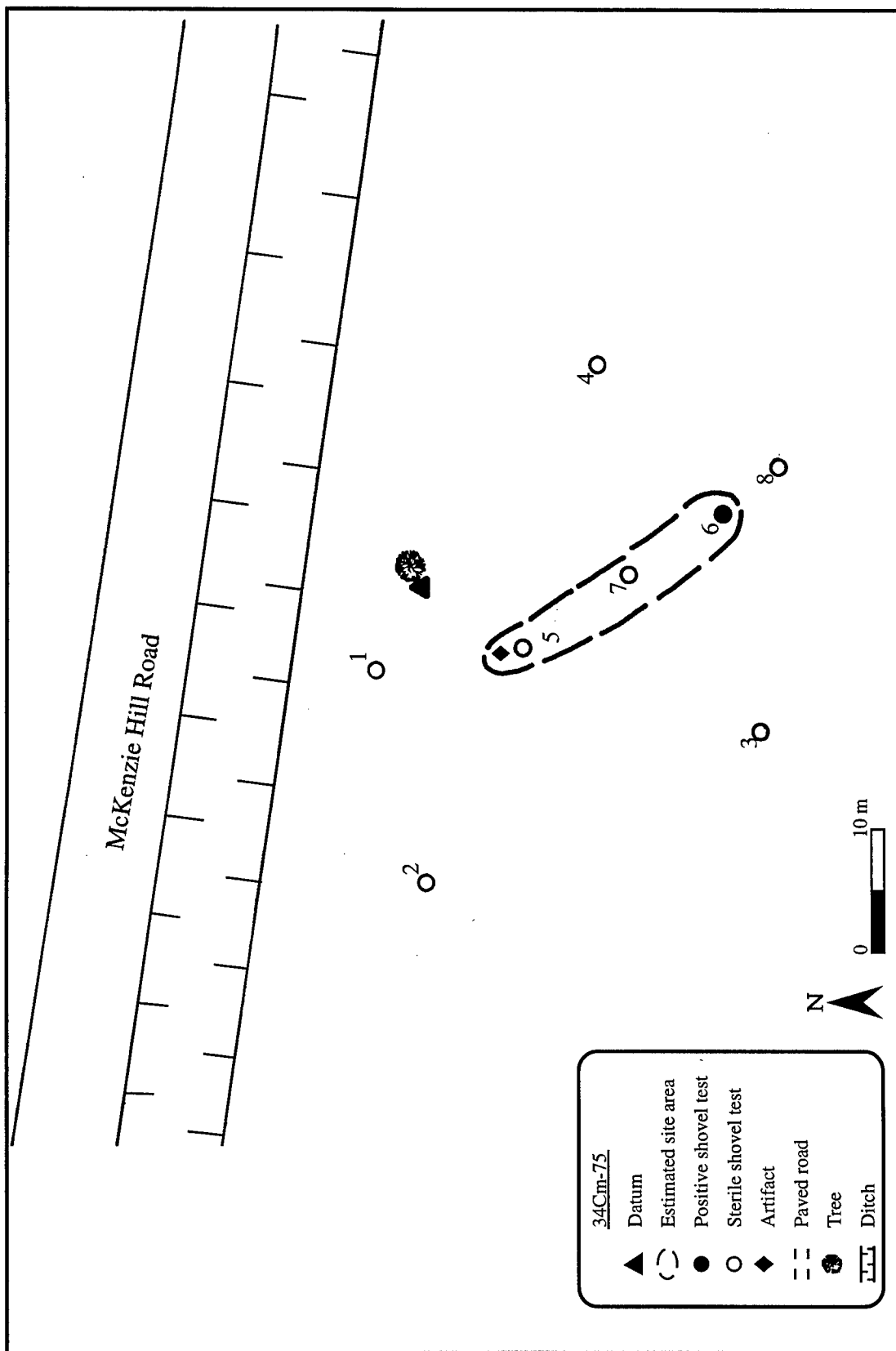


Figure 19. Plan map of site 34Cm-75 (92-92).

1992-1993 Cultural Resources Inventory: Fort Sill, Oklahoma

Prehistoric Artifacts

A secondary flake of oolitic chert was collected from the surface of this site, while less than 10 additional pieces of lithic debris were observed on the ground surface but not collected. The oolitic chert retains approximately 30 percent rough, unworn dorsal cortex. This piece is mottled white and very pale brown with oolitic inclusions (<.5 mm) and large, chalcedonic spherical inclusions (1 to 2 cm). This piece measures between 2 and 3 cm in size.

A single Ogallala quartzite flake fragment was recovered from Shovel Test 6, Level 2. This fragment measures between 1 and 2 cm in length.

Previously Collected Artifacts

Shaeffer (1966:33-34) recorded three lithic artifacts, including a Fresno arrow point and three pieces of bone for this site. Raw material types were recorded as two quartz and one basalt. Re-analysis of the prehistoric material collected from this site has confirmed the artifact counts but not artifact types: no diagnostic prehistoric artifacts are in the collection. The lithic material consists of two angular fragments of quartz and one angular fragment of black, medium-grained quartzite. Cultural modification of all three of these items is questionable. The faunal material consists of two fragments of turtle carapace and a vertebrae. All three of these remains are only marginally weathered and are probably from a single individual that died within a year of collection.

One historic item was recorded for this site, a china fragment (Shaeffer 1966:33). The collection now contains two whiteware fragments (they do not conjoin), a horseshoe, a metal fragment (shrapnel?), a screw top liquor bottle cap, and a metal machine part.

Summary

Discrepancies in what was originally recorded for this site and what is now in the collection, especially since the quantity has increased, make previous research of this site unreliable. While there does appear to be subsurface material at this site, quantities and types of artifacts are limited. This site is a very low density scatter of lithic debris. No diagnostic artifacts were observed. This site does not have potential for increasing our understanding of the prehistoric and historic utilization of the Wichita Mountains region. No further testing is recommended for this site, and it is not recommended for inclusion in the NRHP.

34Cm-461 (92-93)

This site is located at the northern foot of an outlier of the Wichita Mountains. Lithic artifacts were observed in a heavily eroded dirt road that circles the northern side of the outlier. The site is located at an elevation of 393 m (1,290 ft) amsl in an area mapped as stony rock land. Vegetation observed in the area of the site consisted of post and blackjack oak with a sparse ground cover of mixed grasses.

This site consists of three small chert flakes that were observed on the surface of an unimproved dirt road and collected. The construction of the dirt road and subsequent erosion have removed any trees from the immediate site area and denuded large areas of any vegetation. Six shovel tests were excavated in areas

determined to have a potential for intact surface sediments. No cultural material was found in any of the test units. The site area is estimated to be 180 m² (Figure 20).

Prehistoric Artifacts

The three chert flake fragments observed at this site were collected from the surface of this site. The three flake fragments range in size from 1 to 2 cm. Raw materials consist of one piece of Edwards chert and two unknown cherts.

Faunal Remains

Two bone fragments were collected, both of which are less than 1 cm long and appear to be the scapula and cranial fragments of a small mammal. The material is minimally weathered and is probably no more than a year old.

Summary

The severe disturbance to the site area, very low density of artifacts, and lack of diagnostic artifacts limits the significance of this site. No further work is recommended, and this site is not recommended for inclusion in the NRHP.

34Cm-462 (92-94)

This site is located in an unimproved dirt road that runs between a drainage and a large outlier of the Wichita Mountains (locally referred to as Spirit Mountain). The site is located in a steep and rugged area that is deeply dissected. The soil type is mapped as granite outcrop. Elevation of the site is 396 m (1,300 ft) amsl. Large post oaks dominate the area with a heavy undergrowth of greenbrier and poison ivy, and thistle in eroded areas.

Seven lithic items were recovered from the surface of the dirt road. An eighth lithic item was recovered from one shovel test. Six additional shovel tests were negative. No cultural material was observed on the ground surface outside of the area disturbed by the road and resulting erosion. Site area is estimated at approximately 320 m² (Figure 21).

Prehistoric Artifacts

One biface fragment and six pieces of lithic debris were collected from the surface of this site. A shovel test yielded one additional flake fragment. Two additional flakes were observed on the ground surface.

The biface fragment represents the distal section of a preform of fine-grained Ogallala quartzite. This specimen exhibits a traverse medial fracture, possibly from manufacture, and has not been subjected to secondary retouch (Figure 22). This item measures 3.6 cm x 3.0 cm x 1.0 cm and weighs 7.4 g.

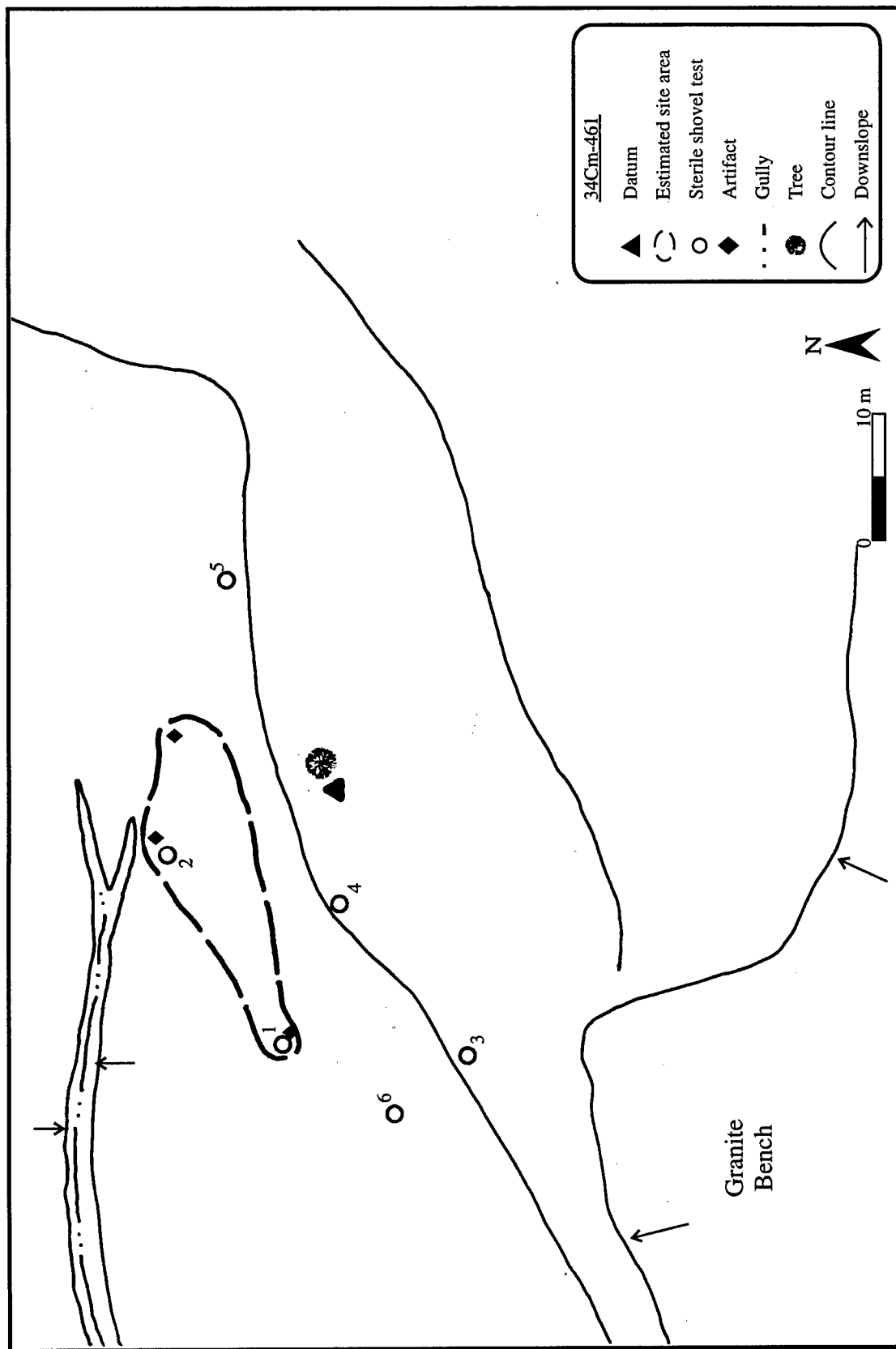


Figure 20. Plan map of site 34Cm-461 (92-93).

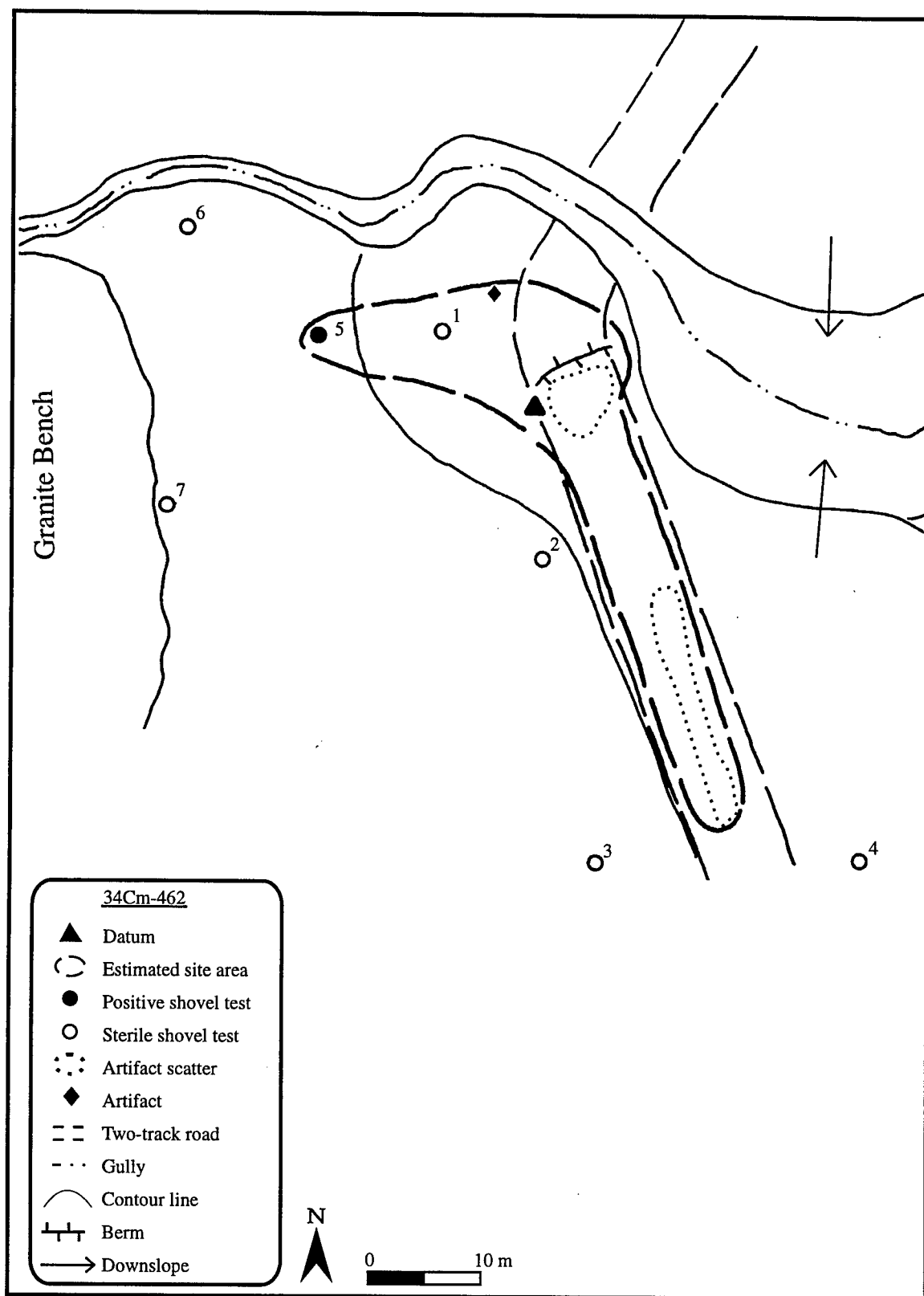


Figure 21. Plan map of site 34Cm-462 (92-94).

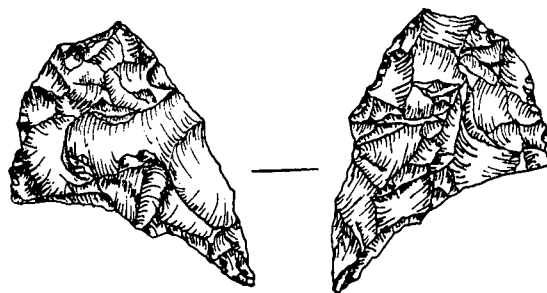


Figure 22. Diagnostic lithic artifact recovered from 34Cm-462 during the 1992 survey: Ogallala chert preform. (Scale 1:1)

The lithic debris from this site consists of one Alibates chert flake fragment, one Kay County chert flake fragment, two flake fragments and an angular fragment of unidentified chert, and one basalt flake fragment. A second Alibates chert flake fragment was recovered from Shovel Test 5, Level 1 and falls into the 1 to 2 cm size range.

Summary

This site is a very low density lithic scatter with a minimal amount of subsurface material. It offers little potential for developing a better understanding of the prehistoric utilization of the Wichita Mountains region. No further work is recommended at this site, and it is not recommended for inclusion in the NRHP.

34Cm-464 (92-96)

This site consists of a large historic farmstead that extends on both sides of the Camp Eagle access road. The site is located on the gentle lower slopes of the Wichita Mountains. Soil type is mapped as granite cobbly land. Elevation of the site is 408 m (1,340 ft) amsl. Large post oak trees dominate the area around the farmyard, with smaller blackjack oak north of the drainage that bisects the site. To the south and west of the site are open, level areas with mixed grass coverage.

The area of the site located west of the access road contains the remnants of barbed wire fence lines, as well as a large scatter of historic material spread along an unimproved dirt road. East of the road is the farmyard with a house foundation, animal pen, a "U"-shaped rock enclosure (10 m linear depth, 20 m at opening, 10 m at base) with a partially buried concrete slab at one end, a cobble fence 4 m northwest of this enclosure, and remnant barbed wire fence lines. One of these fence lines aligns with the remnant fence on the west side of the road. In addition to these features, a second rock enclosure (10 m x 7 m) is present at the north end of the site, 130 m north of the first enclosure. These rock enclosures have walls up to 2 m thick and are of an unknown function.

The farmyard was placed at the very edge of the Wichita Mountains. A low granite ridge runs along the north side of the site and the ground surface rises steeply directly east of the house site. The remnant of a barbed wire fence runs up this slope to the east, out of the project area, and up the mountain.

The farmyard area has a dense scatter of historic artifacts north of the house foundation, primarily in the intermittent drainage that bisects the site area. A lower density of material can be found across almost the entire site area as well as in the area west of the road mentioned above. The entire site measures approximately 25,000 m² in area (Figure 23). Eighteen shovel tests were excavated at this site.

Historic Artifacts

A large quantity of historic material was recovered from the surface of this site; in addition, a single shovel test yielded one unidentifiable metal artifact. Diagnostic ceramic fragments collected from the surface included bluish tint ironstone with partial but unidentifiable maker's mark (1850-1910; Figure 24), decalcomania decorated white-whiteware (1895-1950), handpainted white-whiteware (1890-1990), transfer print white-whiteware (1890-1990), bluish tint whiteware (1880-1930), and undecorated white-whiteware (1890-1990). The stoneware fragments recovered included two-tone (albany and bristol) exterior/albany interior (1890-1915), exterior/interior albany (1875-1900), exterior bristol/interior albany (1890-1915), and exterior/interior bristol (1900-1990).

Diagnostic glass material was abundant on the surface. Manganese solarized (amethyst) glass included a bottle with hand-tooled lip (1880-1920; Figure 25a), bottle fragments, pressed glass fragments, and a threaded jar fragment (1880-1920). Ash tint glass (1915-1990) consisted of bowl fragments, bottle fragments, and a NEHI soda bottle (1925). Other glass material included aqua glass bottle fragments (1860-1990), an Owens-Illinois bottle (1929-1954), a mason jar fragment from the Pine Glass Company (1927-1929; Figure 25b), a pink Depression bowl fragment (1920-1950), a dark amber beer bottle base with a datable mark from an unknown maker (1880-1900), and a non-applied turn molded broken bottle neck (1880-1910; Figure 25c). Three fragments of window glass were also collected. Other historic material collected included wire nails (1880-1990), a .22 caliber brass cartridge (Utah 1890-1990), horseshoe, metal spindle, bolt, and a stove part. A MBD of 1892 is estimated for the site based on the recovered diagnostic historic material.

Archival Research

The deed title history of site 34Cm-464 is actually the history of the three separate parcels of land upon which the site is located. The largest portion of the site is located in Section 6. This parcel of land, comprising the entire northern half of site 34Cm-464, was a Euro-American homestead. The southeastern quarter of site 34Cm-464, situated in Section 7, also was a Euro-American homestead, while the southwestern quarter of the site, also located in Section 7, was a Native American allotment.

The northern half of the site is in Section 6. On this portion of the site existed a Euro-American homestead that changed hands as a stable unit throughout the period between 1901 and 1932 (Comanche County *Deed Books* 6:383, 7:345, 11:67, 14:387, 25:633, 148:197-198, 152:544, 181:455, 198:376, 201:398, 212:597, 224:120). Several mining claims were made on this part of site 34Cm-464 between 1901 and 1903, including some by miners from the Wiggins Camp (the mining community of Craterville) in Section 7 (Comanche County *Deed Books* 3:219, :276, 8:34). The original homesteader, Henry Gadberry, sold his

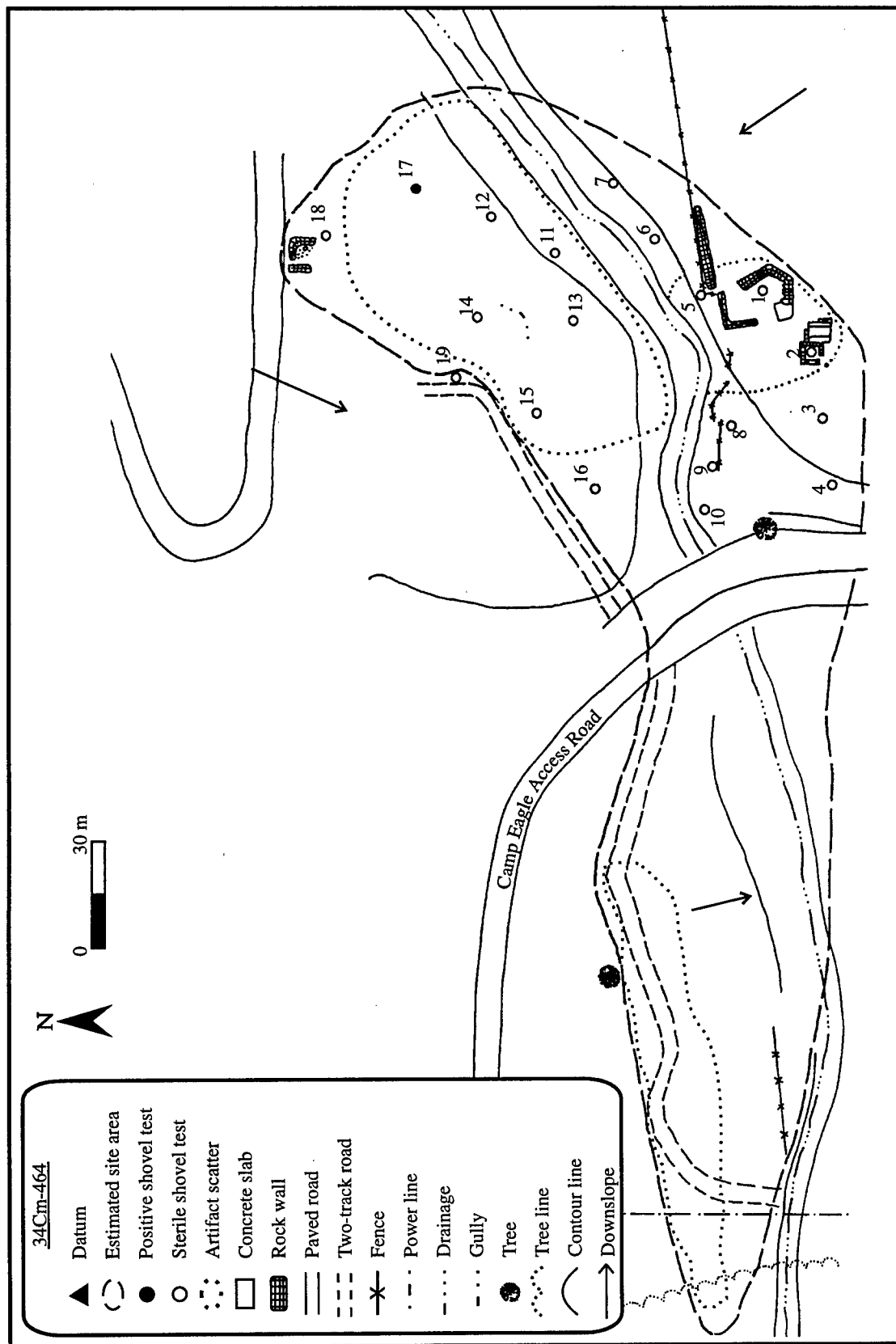


Figure 23. Plan map of site 34Cm-464 (92-96).

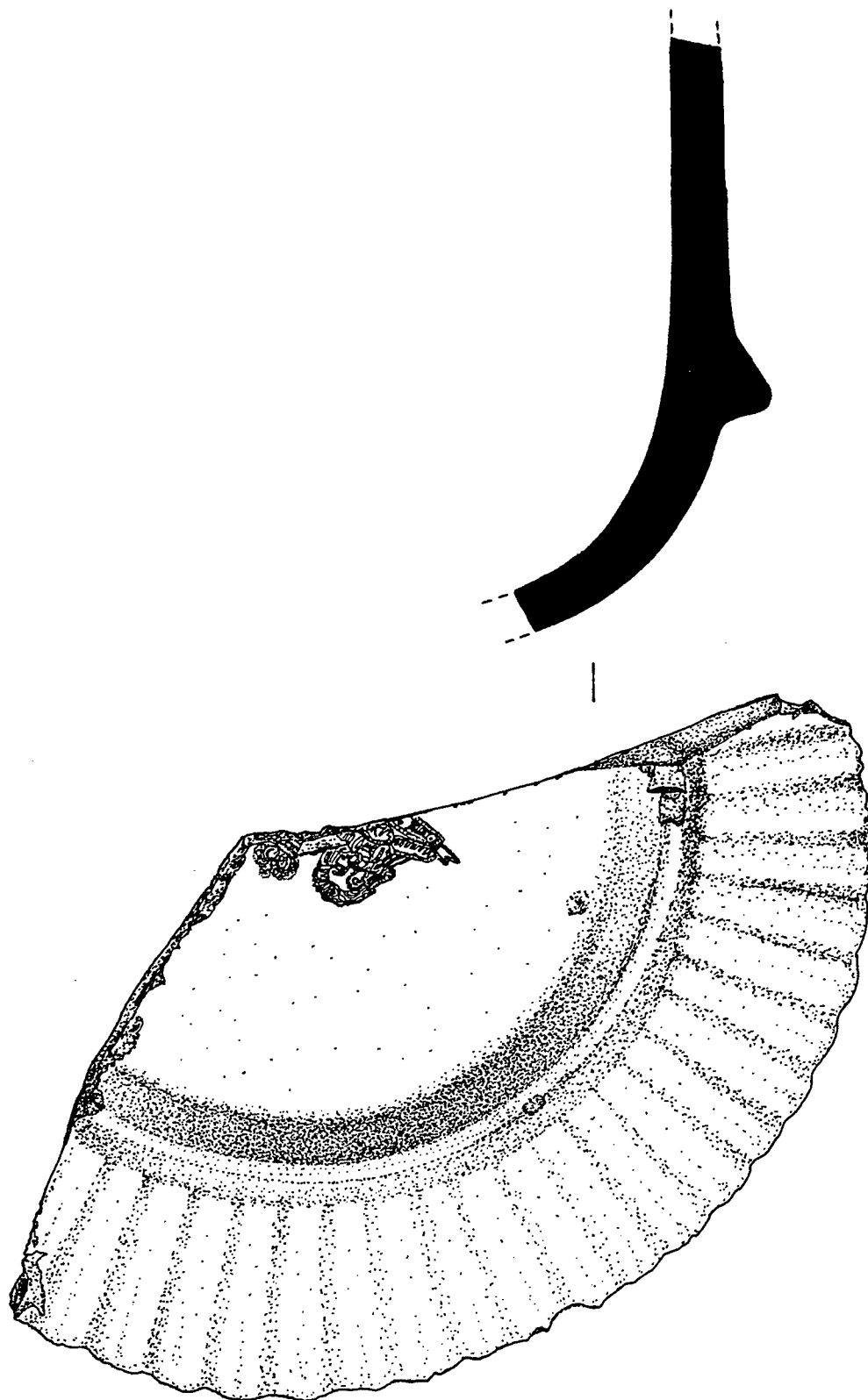


Figure 24. Selected historic artifact from 34Cm-464: bluish tint ironstone with partial maker's mark. (Scale 1:1)

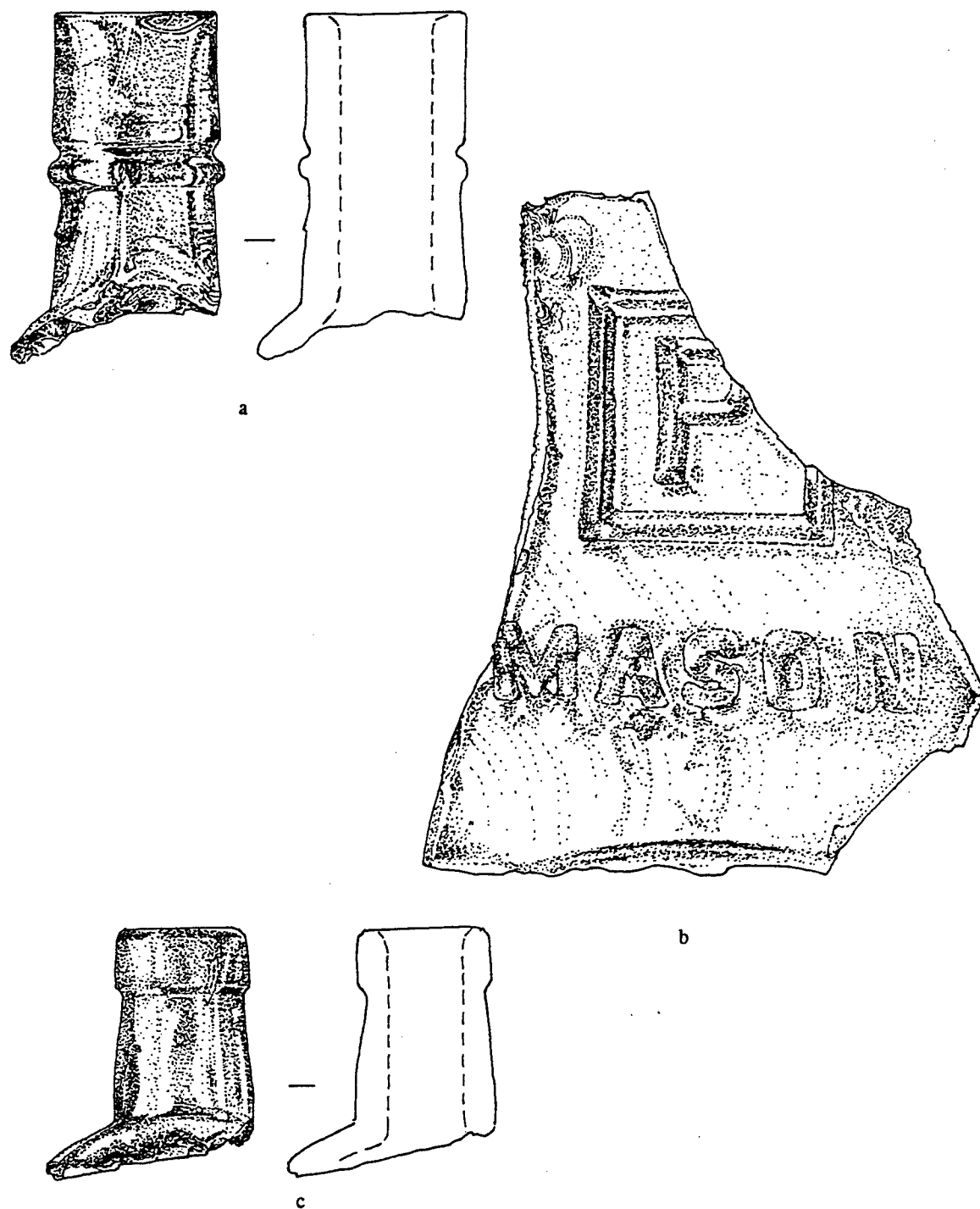


Figure 25. Selected historic artifacts from 34Cm-464: (a) manganese solarized hand-tooled bottle lip; (b) Pine Glass Company Mason jar fragment; (c) green non-applied turn molded bottle lip. (Scale 1:1)

parcel of land almost immediately after receiving a patent for it in 1903 (Comanche County *Deed Books* 6:383, 7:345, 11:67). The land changed hands three times within that year (Comanche County *Deed Books* 7:345, 14:387, 25:633). For the next 21 years, this portion of the site was in the possession of absentee landowners from Washington state, the Remick family (Comanche County *Deed Books* 25:633, 148:197-198, 152:544, 181:455, 198:376), whose only recorded use of the land was to lease it for oil and gas well drilling purposes beginning in 1914 (Comanche County *Deed Books* 148:197-198). The land was purchased by the Ware family in 1924, who leased the parcel to the State of Oklahoma for use as part of a wildlife refuge for a period of 10 years beginning in 1927 (Comanche County *Deed Books* 224:120). The Wares lived in Comanche County, probably in the town of Cache (Comanche County *Deed Books* 201:398, 219:481). In 1932, the land upon which the northern half of site 34Cm-464 is located became the property of the Rowe family, who owned all of Section 6 by 1947 (Comanche County *Deed Books* 219:481, 303:369, 396-397, 343:438, 346:445). The Rows deeded Section 6 (along with Section 5 and parts of Sections 7 and 8) to Frank and Genelle Rush, his wife, in January 1950. The wording of the deed suggests that all or part of the land deeded to the Rushes may have been rented by them from the Rows prior to 1950, or by the Rows from the Rushes after 1950 (Comanche County *Deed Books* 331:629, 346:445). The Rushes owned the land for seven years before the United States filed suit to obtain it in 1957 (Comanche County *Deed Books* 448:552-555).

The early history of the northern half of site 34Cm-464 is thus one of rapid turnover and absentee land ownership. Therefore, it does not seem likely that the foundations in the southeast quarter of the site were the work of people who owned the portion of site 34Cm-464 situated in Section 6. It seems possible that early miners left evidence of their presence in this portion of Section 6. Later owners, like the Rushes, may have left behind such artifacts as the floodlights listed on the site description (location unspecified). Recorded and unrecorded lessees, hunters from the wildlife refuge lease era, and/or squatters from any era also may have been responsible for some of the artifacts and features found in this portion of the site.

The southern half of site 34Cm-464 is located in Section 7 on a one-time Native American allotment. Ase-quits-quip, a Comanche, originally was allotted lots 1 and 2 plus an additional 80 acres of Section 7, a total of 156.74 acres (Anonymous n.d.:22; Comanche County *Deed Books* 362:214). It is unlikely that Ase-quits-quip ever lived on the property. The earliest transaction having to do with this property that is recorded in Comanche County *Deed Books* is the transfer of rights granted in an earlier, unrecorded lease. This transfer of rights dates to 1904. In that year, Elizabeth K. Peck assigned her one-half interest in the previously existing lease to Andrew McMacken of Craterville. Peck, who lived in Sparkill, Rock Island County, New York, agreed "to pay all rents due on said lease" (Comanche County *Deed Books* 32:248). Because the original lease is not recorded in the Comanche County *Deed Books*, neither the dates nor the terms of the lease are known. Early twentieth century leases of restricted Native American lands had to be approved by the Superintendent of the Agency and an Assistant Commissioner of Indian Affairs (Comanche County *Deed Books* 170:361), so it is possible that the records of the Office of Indian Affairs, the Bureau of Indian Affairs (BIA), or the Anadarko Area Office of the BIA might contain a copy of the original lease.

Ase-quits-quip's land was rented by the State of Oklahoma for a term of 10 years beginning in September 1927, to be used as part of a wildlife refuge. Ase-quits-quip's allotment was only a part of the land rented by the state. Lessors in the document were listed as W. M. Ware, T. R. Shafer, and W. M. Bonnell (Comanche County *Deed Books* 224:120). It is possible that one of the people listed was an heir of Ase-quits-quip or Ase-quits-quip's lessee. It also is possible that a separate lease, not recorded in the Comanche County *Deed Books*, was made by the State of Oklahoma with Ase-quits-quip or Ase-quits-quip's heir(s).

In April 1951, in accordance with an act passed on June 17, 1948, the U.S.A. assigned the patent for Ase-quits-quip's allotment to Clay Miller (Comanche County *Deed Books* 362:214). In August 1956, Wayne Misener quit claim deeded lots 1, 2, and 3 and a portion of Section 7 to Clay and Minnie Lee Miller for \$1.00 (Comanche County *Deed Books* 438:654-655). The rights Misener previously had to the land are not explained in the deed, but farming, grazing, or mineral rights are all possibilities. Misener probably did not live in Oklahoma, as he visited a notary in White County, Illinois, in connection with the quit claim deed (Comanche County *Deed Books* 438:654-655).

Clay and Minnie Miller deeded lots 1, 2, and 3, and a portion of Section 7 to the U.S.A. in 1957 for \$23,700 (Comanche County *Deed Books* 439:655). Quit claim deeds from the local telephone exchange and electric co-op indicate that in the late 1950s, no phone or electric lines ran through the area where site 34Cm-464 is located (Comanche County *Deed Books* 470:736).

Because of the length of time that this parcel of land was leased, it is unlikely that Ase-quits-quip or his heir(s) or lessees were responsible for the remains of the farm found in the southeast portion of the site. It is possible that the Millers lived there and left evidence of their occupation. It is unlikely, however, that the Millers were associated with site 34Cm-464, since the primary features of the site are located on land the Millers did not own. It seems likely that the Millers resided on another portion of Section 7 in the western half of their property, which contains two lots bordering on Craterville Park.

The third portion of site 34Cm-464 is the part of the site where most of the primary features are located, including a house foundation, animal pen, U-shaped rock enclosure, and cobble fence. The land on which this portion of the site is located was originally a Euro-American homestead. Two families owed this parcel for extended periods of time: one for 38 years, another for 18 years.

Ten legal documents relating to mining claims, including mining notices, receipts for assessment work, and quit claim deeds dealing with land in Section 7, appear in the Comanche County *Deed Books* (2:555, 3:211, 215, 4:104, :220, 6:128, 18:355, 23:377, 517, 30:307) for the period between 1901 and 1905. The original homesteader on the land where the southeast quarter of site 34Cm-464 is located was Eva Pannill, who obtained a patent in 1901 (Comanche County *Deed Books* 90:320). She married Andrew Bonnell sometime between 1901 and 1917 (Comanche County *Deed Books* 157:392), and her land remained in the Bonnell family for 38 years, until 1939 (Comanche County *Deed Books* 90:320, 146:480, 157:392, 163:472, 197:545, 203:302, 219:466, 224:120). Eva Pannill may not have lived on Section 7 any longer than necessary to obtain a patent to the land. It is possible that Pannill did not live there at all: abuse of the homesteading system could and probably did occur at times. She may have leased the land to someone or used it for farming or grazing while living elsewhere. The Bonnells, who let two oil and gas leases during the period they owned the property (Comanche County *Deed Books* 157:392, 163:472), are listed as residents of Cache on the second oil and gas lease, dated 1919 (Comanche County *Deed Books* 163:472). This may mean that the family lived off their Section 7 property by that time, or the reference to Cache may be to their post office address. It is unlikely that the Bonnells lived on the land after 1929, the date after which the land was leased for a term of 10 years to the State of Oklahoma for use as part of a wildlife refuge (Comanche County *Deed Books* 224:120).

By the late 1920s, the Bonnells' land holdings had expanded considerably. They owned most of Sections 5 and 6, and portions of Sections 4, 7, and 9 in Township 2 North, Range 13 West. In July 1932 Eva Bonnell, "a widow of Cache, Oklahoma," sold E. M. Rowe of Meers, Oklahoma, a total of 76.43 acres of land, including the north half and the southwest quarter of the northeast quarter of Section 7 (Comanche County *Deed Books* 219:466). The land on which the southwest quarter of site 34Cm-464 is located

remained in the Rowe family for 18 years (Comanche County *Deed Books* 219:466, 303:369, 343:439, 346:445). It is not likely that the Rowes lived on the land where the southeast quarter of site 34Cm-464 is located: their homestead was situated in Section 33 in Township 4 North, Range 13 West (Comanche County *Deed Books* 303:369). Despite the fact that no lease appears in the Comanche County *Deed Books*, tenants of the Rowes may have lived on the land during this time. In February 1950, Wayne and Idell Rowe sold the land to Frank and Genelle Rush. The land sold by the Rowes to the Rushes included Sections 5, 6, the north half of Section 8, and parts of Section 7 (Comanche County *Deed Books* 346:445). The Rush family owned the land until 1957, when the U.S. filed suit to obtain the area (Comanche County *Deed Books* 448:552-555). It is possible that the Rush family had tenants on their land whose leases are not listed in the Comanche County *Deed Books*.

Either the Bonnell or the Rowe family or their lessees might have been responsible for construction of the primary site features located in the southeast quarter of site 34Cm-464 (the northeast quarter of Section 7). The fact that there were neither telephone nor electric lines in the northeast quarter of Section 7 may add weight to the hypothesis that the site was constructed and occupied early during the period in question (1901-1957). However, the lack of phone and electric lines does not preclude a later date, because many rural families may not have owned phones or had electricity in the 1950s.

Because the owners of the other two parcels of land upon which site 34Cm-464 is located were absentee landowners for long periods of time, it is possible that the farmer(s) from the southeast quarter of the site rented the northern and southwestern portions of land upon which the site is also located. Given the absentee landowner situation in the northern and southwestern parts of the site, it also may have been possible for a farmer to have used the land without a rental agreement.

Summary

This is a well-preserved site, one of the few historic sites in the Craterville Park area that has not been totally destroyed. Additional testing is recommended in order to evaluate fully this site's potential for inclusion in the NRHP.

Survey Area 3

Survey Area 3 consists of a 2,785-acre parcel located at the eastern end of the Quanah Range Impact Area (Figure 26). This area is characterized primarily by gently rolling plains, with some moderately rolling areas in the north and northwest sections of survey area. The northern portion of the survey area is dominated by the southern half of Quanah Mountain. Near-surface bedrock consists mostly of granite and rhyolite porphyry conglomerate overlain by sand and gravel, while granite forms the bedrock of the northernmost portion of the survey area.

The soils in the uplands of this survey area are dominated by Foard-Slickspots complex with areas of granite cobbly land, Lawton loam, and Foard-Tillman soils. Relatively extensive alluvial deposits are located along West Cache Creek, Quanah Creek, and Rock Creek, with Port loam, patches of Port-Slickspots complex, and Broken Alluvial land indicated. No other significant creeks are located within the survey area, merely small drainages not associated with alluvial deposits.

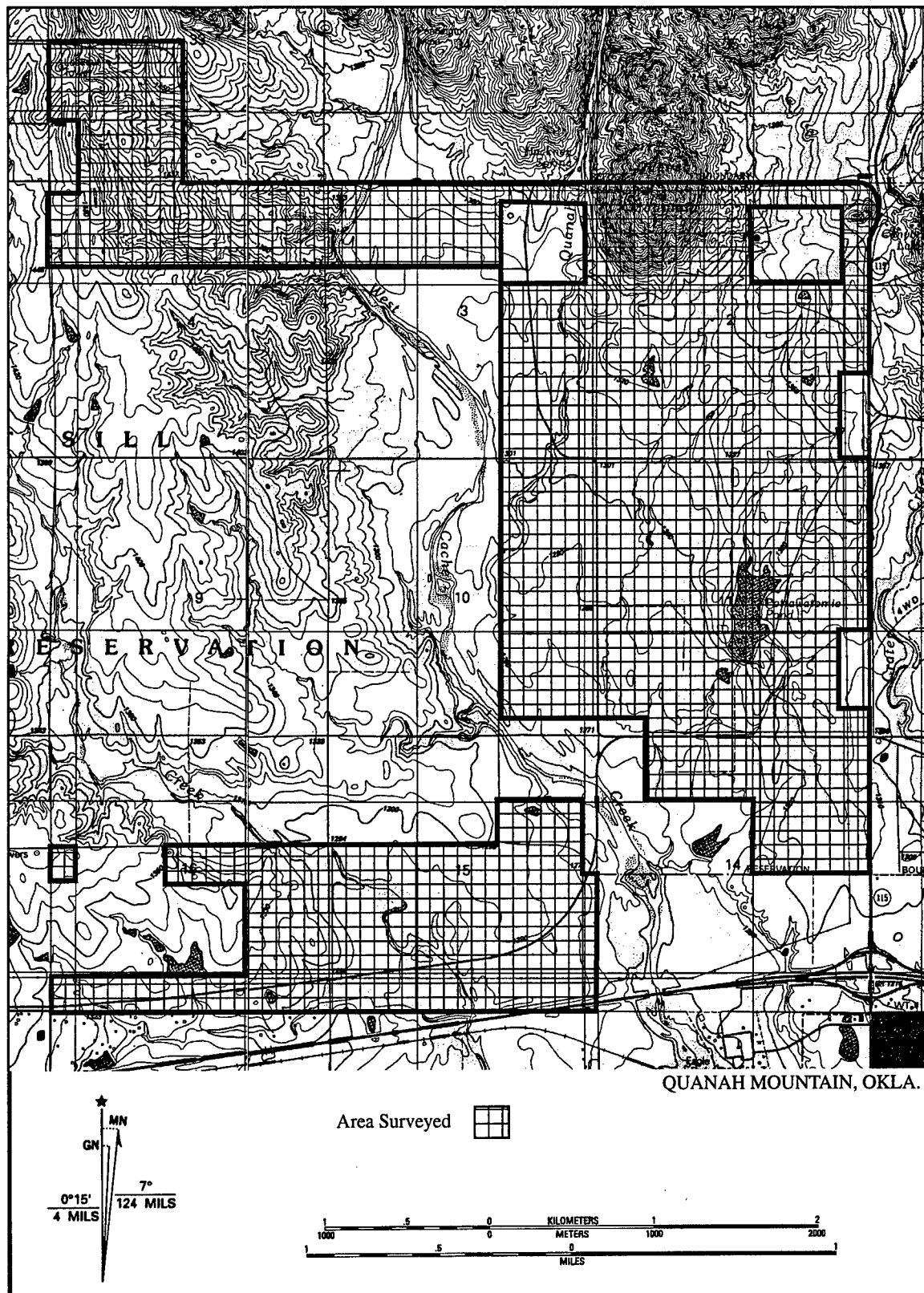


Figure 26. Location of Survey Area 3 within the Fort Sill Military Reservation.

Four previously recorded prehistoric sites (34Cm-80, 34Cm-85, 34Cm-87, and 34Cm-276) and three unrecorded ruins are known for this survey area. Only site 34Cm-276 was relocated; however, sites 34Cm-80 and 34Cm-87 lie almost entirely within the Quanah Range Impact Area, an area that was not surveyed during the current project, and no trace of site 34Cm-85 was found. All three ruins were relocated; two were recorded as manifestations of historic site 34Cm-480 [92-115] and the third as multicomponent site 34Cm-454 (92-83). In addition to these sites, another 11 historic sites (34Cm-482, 34Cm-489, 34Cm-492, 34Cm-493, 34Cm-494, 34Cm-495, 34Cm-496, 34Cm-498, 34Cm-500, 34Cm-501, and 34Cm-502), six prehistoric sites (34Cm-455, 34Cm-474, 34Cm-479, 34Cm-483, 34Cm-484, and 34Cm-490), and one multicomponent site (34Cm-467) were recorded.

34Cm-454 (92-83): Quanah Parker's Star House (original location)

Site 34Cm-454 is the original site of Quanah Parker's 1894 Star House. Star House, a two-story, twelve-room house of wood frame construction which is listed on the NRHP, is now located in Cache, Oklahoma. The original house site is situated on a broad, low bench bordering Quanah Creek, south of Quanah Mountain. Soil in the area is mapped as a boundary between Port loam, Foard-Slickspots complex, and granite cobbly land, with observation indicating that the house site is on granite cobbly land. The elevation of the site is 399 m (1,310 ft) amsl. Vegetation observed in the area of the site consists of sumac, wild plum, juniper, elm, hackberry, post oak, mesquite, bois d'arc, Johnson grass, long stem bunch grass, goldenrod, sunflower, ragweed, black-eyed Susan, and thistle.

Five features were recorded at this site. Feature 1 consists of a 25-m long poured concrete sidewalk. From historic photographs, it is known that this sidewalk extended east to west from the fence gate to the house's main entrance. Two flower beds containing irises flank the sidewalk at its house terminus and a line of overgrown juniper trees parallels the walk.

Feature 2 is a small portion of the house foundation located south of the sidewalk. This concrete footing is 3 m long and would have formed part of the southeast corner of the original foundation. No other in situ remains of the house foundation were observed.

Feature 3 is a mortared brick well that measures 90 cm in diameter and has a 2-m by 3-m concrete slab encircling the well neck. This slab has the date "2-28-17" scratched in the cement. The well is on the south side of the sidewalk, near the gate. Historic photographs indicate that this well originally was enclosed in a small wood frame structure.

Feature 4 is a 238-cm diameter cistern. It is constructed of poured concrete over granite cobbles. There are now a number of steel reinforced concrete slabs in the bottom of the cistern that were probably part of the house foundation or porch. Local informants have indicated that this cistern was located inside the "L" created by the two wings of the house.

Feature 5 is a collection of aligned granite cobbles, fence posts, strands of barbed wire, and small trees arranged in a rectangular border around three sides of the house site. Historic photographs indicate that there was originally a wood picket fence in this general location; evidence indicates that this original fence was replaced by a barbed wire fence at a later date. The entire site encompasses approximately 6,300 m² (Figure 27).

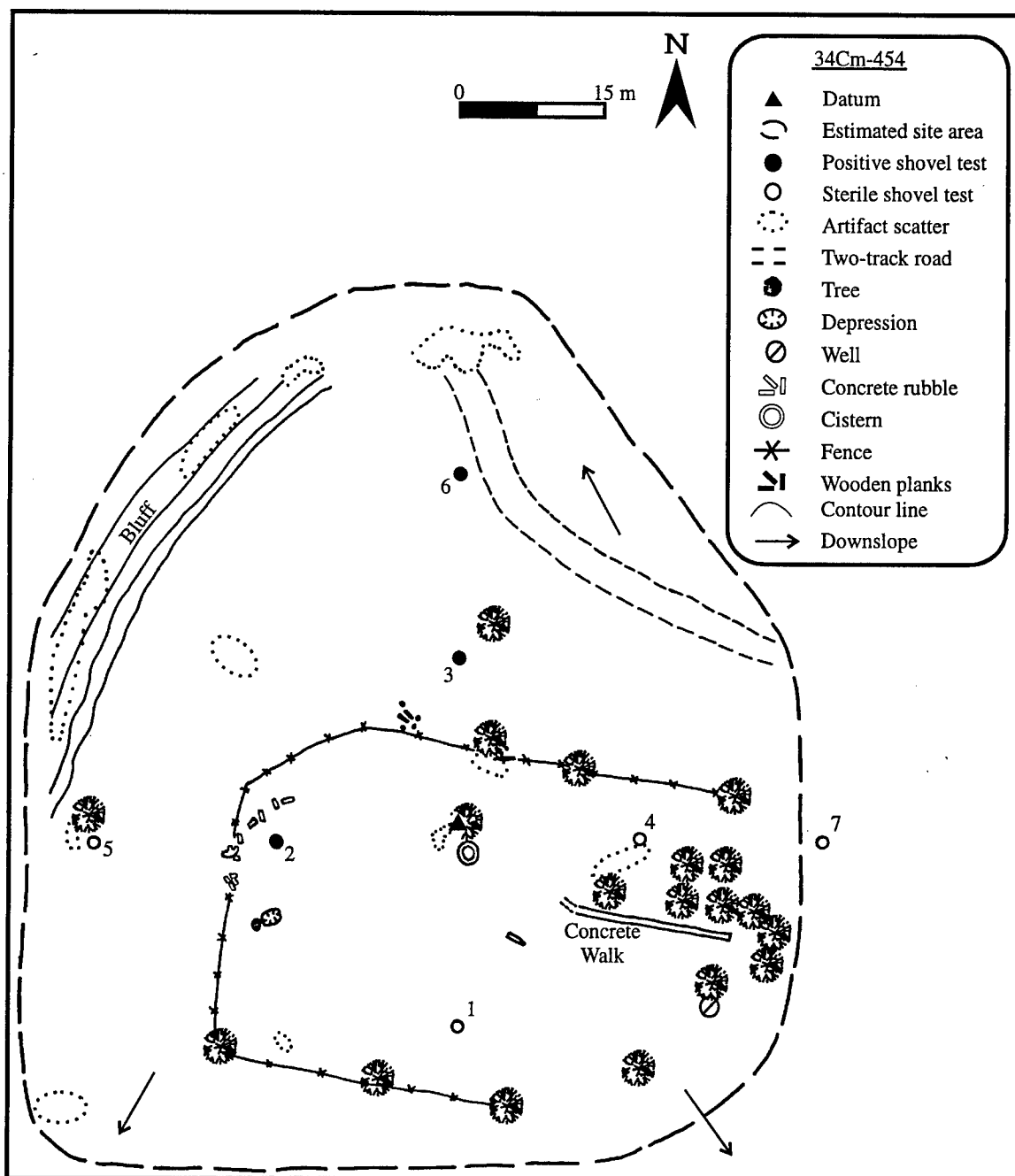


Figure 27. Plan map of site 34Cm-454 (92-83): Original location of Quanah Parker's Star House.

This site also contains a prehistoric component, consisting of 25 lithic artifacts observed on the ground surface at the western edge of the bench. The main concentration of historic artifacts was also located at the bench edge and downslope toward Quanah Creek. One quartz flake and two angular fragments were recovered from one shovel test, two additional tests yielded historic material, and four shovel tests were negative. In general, surface sediments are very shallow at this site.

Prehistoric Artifacts

Two end scrapers, one possible biface fragment, and three angular fragments were collected from the surface of this site, while one flake fragment and two angular fragments were recovered from a shovel test. No other lithic material was collected at the site.

Tools

An Alibates (10YR 6/2) chert end scraper that has been broken along one lateral edge and at the distal-end (Figure 28a) was recovered from the surface of this site. The scraper bit exhibits heavy use wear. The measurements of this specimen are 2.4 cm across the bit, 1.8 cm from the bit to the broken distal end, .7 cm thick, and it weighs 3.1 g. The second end scraper (Figure 28b) was made from a milky, translucent (5YR 8/4) quartz flake. The flake has been steeply chipped on the dorsal surface to form the scraper bit; the ventral face on the opposite end has also been trimmed, apparently to facilitate hafting. This scraper measures 2.4 cm x 2.0 cm x .6 cm and weighs 3.0 g.



Figure 28. Diagnostic lithic artifacts recovered from 34Cm-454 during the 1992 survey: (a) Alibates chert end scraper; (b) quartz end scraper. (Scale 1:1)

A piece of white and rose colored quartz may be a preform fragment or just a fortuitously fragmented angular fragment. This item does exhibit some flake scarring. The dimensions of this piece are 3.2 cm x 2.0 cm x .9 cm, and the weight is 4.7 g.

Lithic Debris

Three quartz angular fragments were collected from the surface of this site. One of these fragments is within the 2 to 3 cm size range, while the other two are within the 3 to 4 cm range.

Shovel Test 2, Level 1 (0 to 20 cm bs)

One quartz angular fragment between 2 and 3 cm in length was recovered from the first level of this shovel test unit.

1992-1993 Cultural Resources Inventory: Fort Sill, Oklahoma

Shovel Test 3, Level 1 (0 to 20 cm bs)

One quartz angular fragment between 2 and 3 cm in length was recovered from the first level of this shovel test unit.

Shovel Test 6, Level 1 (0 to 20 cm bs)

The medial portion of an Ogallala quartzite flake was recovered from the first level of this test unit. This artifact is between 1 and 2 cm in length.

Historic Artifacts

The majority of historic diagnostic material was recovered from the surface with only two shovel tests producing historic materials; each contained a fragment of machine-made brick (1890-1990). Diagnostic ceramics from the surface consisted of two exterior/interior bristol stoneware fragments (1900-1990), one white-whiteware fragment (1890-1990), one handpainted white-whiteware fragment (1890-1990), a decalcomania decorated white-whiteware fragment from Royal Pottery (1930-1950; Figure 29a), and three Fiestaware fragments (1930-1960). Diagnostic glass material included manganese solarized goblet bases and a pressed decorative train (1880-1920), an ash tint machine-made bottle (1915-1990), an amber machine-made bottle (1910-1990), and a green milk glass bowl fragment (1920-1950). Also collected was a copper penny (dated 1895; Figure 29b). A MBD of 1903 is estimated from the diagnostic historic material collected from the surface.

Archival Research

Site 34Cm-454 is the original site of the ca. 1889 Quanah Parker home, called Star House. After being moved to Cache early in 1957, Star House was taken to its present location at H. W. Woesner's Eagle Park Amusement Park north of Cache (Fort Sill Museum 1957:1, 1970:n.pg.). The house became a National Register historic site in 1973 (Fort Sill Museum 1973:n.pg.).

Quanah Parker obtained this property during the 1901-1902 allotment of Kiowa, Comanche, Apache, and Wichita reservation lands (Anonymous n.d.:n.pg.; Wallace and Hoebel 1952:351). The first transaction having to do with this parcel of land in the Comanche County *Deed Books* dates to 1922. Records indicate that in that year, 11 years after Quanah Parker's death, Parker's daughter Neda (Laura) and her husband Aubra C. Birdsong deeded the land to Neda's daughter Anona (Comanche County *Deed Books* 446:116; Fort Sill Museum 1957:n.pg., n.d.:n.pg.). Neda Parker Birdsong reportedly lived in Star House until 1956 (Fort Sill Museum 1957:n.pg.).

In August 1944, despite the fact that the land was owned by Anona Birdsong, Neda Parker Birdsong deeded a half interest in the southern portion to her husband Aubra C. Birdsong (Comanche County *Deed Books* 295:194). This action necessitated the production of affidavits at the time of the transfer of the property to the U.S.A. by both Neda and Anona Birdsong, attesting to the fact that Anona had not deeded the land back to Neda between 1922 and 1956 (Comanche County *Deed Books* 446:116-117).

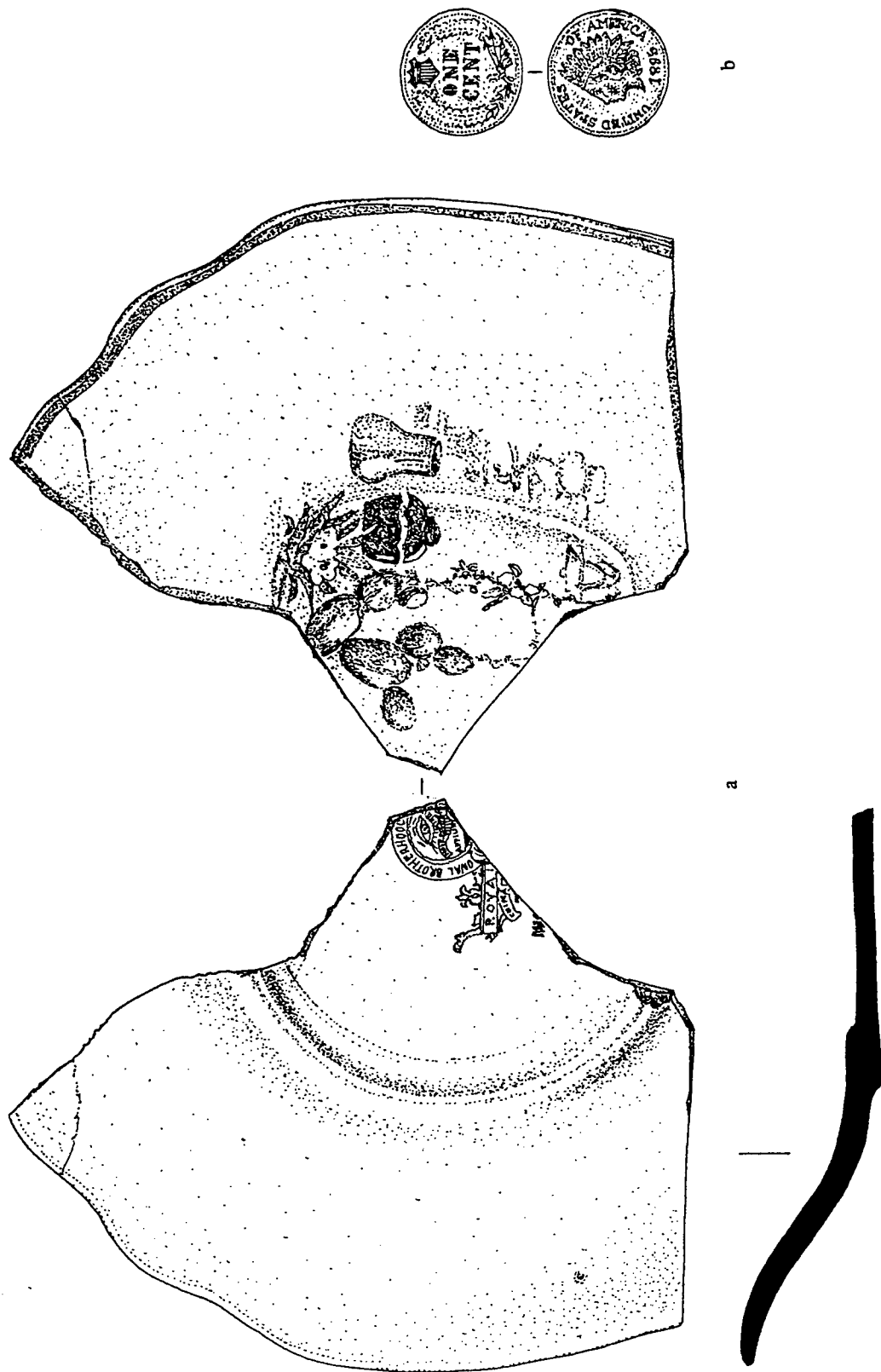


Figure 29. Selected historic artifacts from 34Cm-454: (a) decalcomania decorated white-ware fragment with Royal Pottery maker's mark; (b) 1895 Indian Head penny. (Scale 1:1)

Summary

This site is presently in good condition, with only slight disturbances from five fox holes dug along the western edge of the bench. Some general erosion has taken place, but it is not severe. Both intact features and intact archeological deposits are present. Additional archival research and further testing is recommended for this site in order to evaluate fully its potential for inclusion in the NRHP. However, it is recommended that preservation efforts should not be delayed for this potentially significant property.

34Cm-455 (92-84)

Site 34Cm-455 is a very low density lithic scatter located on the moderately sloping upland south of Quanah Mountain. Soil in the area is mapped as granite cobbly land; site elevation is 409 m (1,345 ft) amsl. Vegetation observed in the area of the site consisted of post oak, juniper, mesquite, long stem bunch grass, goldenrod, ragweed, and black-eyed Susan.

This site consists of a surface scatter of chert and quartzite debris; no diagnostic items or tools were observed at this site. The site has been subjected to several disturbances including severe erosion, military traffic, construction of a latrine, and the construction of a small stock pond built on east edge of site. Only about 10 percent of the ground surface has any remaining vegetative cover. Four shovel tests were excavated across the site, revealing a fine sandy-silt soil with granite pebble inclusions. Surface sediments are extremely compact, particularly where vehicular traffic has impacted the site, and have a depth no greater than 15 cm. No cultural material was recovered in any of the shovel tests. The site area was estimated to be approximately 2,800 m², or about 70 m NW/SE by 40 m NE/SW (Figure 30).

Prehistoric Artifacts

Six pieces of lithic debris were collected from the surface of this site. These artifacts consist of one tertiary chert flake between 1 and 2 cm in size, one Ogallala quartzite flake fragment between 1 and 2 cm, three quartz flake fragments between 1 and 2 cm in length, and one angular fragment of badly flawed chalcedony between 3 and 4 cm long.

Summary

This site has yielded a limited cultural assemblage, and exhibits no evidence of subsurface archeological deposits. No further work is recommended, and the site is not recommended for inclusion in the NRHP.

34Cm-467 (92-101)

This site represents a moderate density surface lithic scatter. The material was observed in the firebreak maintained by the military around the base of Quanah Mountain; Quanah Creek is located directly west of the northwest end of the site. The soil at this site is mapped as breaks-alluvial land complex and the elevation of the site is 402 m (1,320 ft) amsl. The site area is located within an area of typical Cross Timbers vegetation, containing moderate-sized post oaks and smaller blackjack oak. Upslope the trees thin

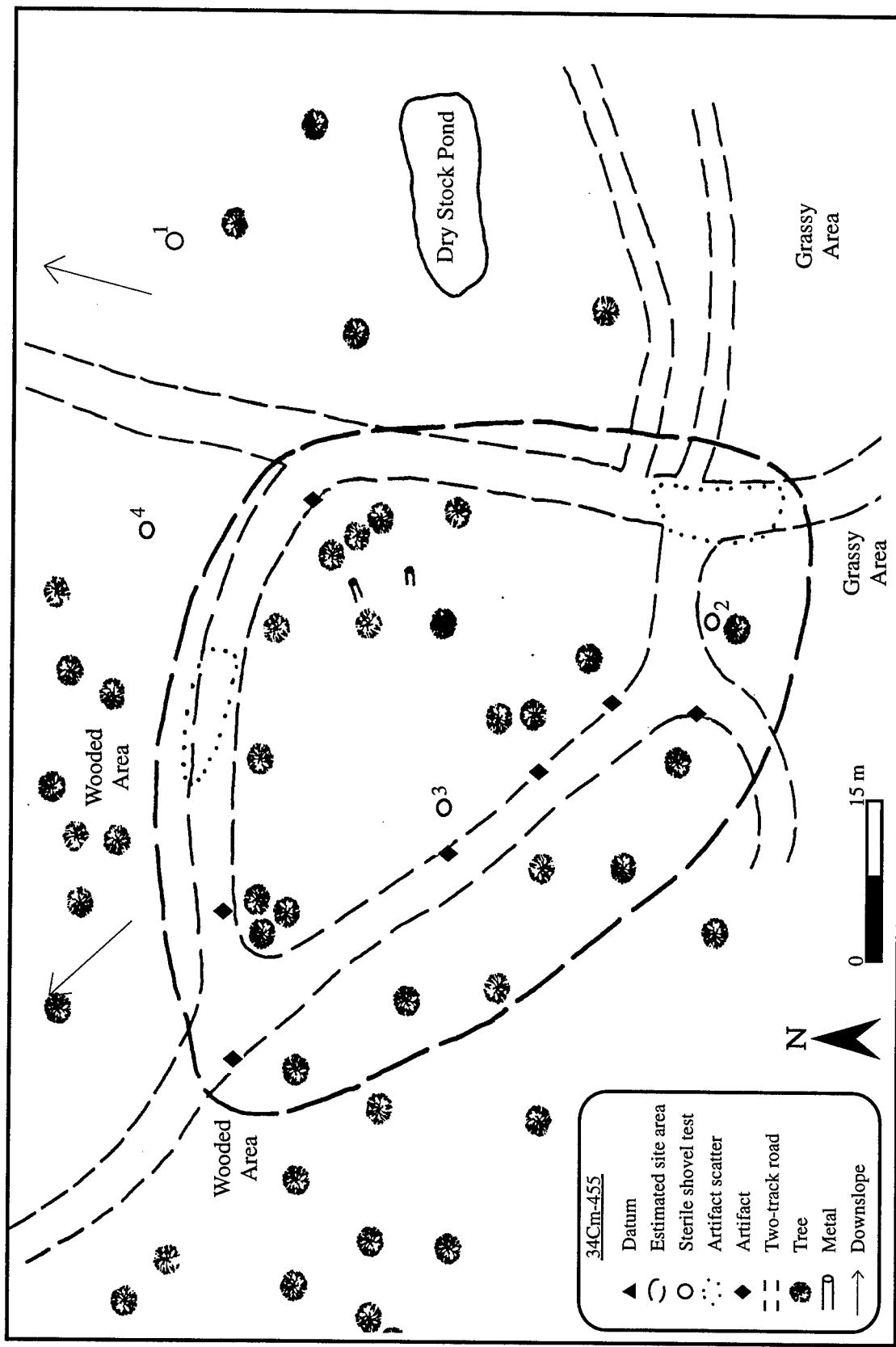


Figure 30. Plan map of site 34Cm-455 (92-84).

out on the granite slopes of the mountain, while downslope along the creek the vegetation becomes very dense.

This site contains two concentrations of lithic artifacts, a northern concentration starting at the edge of Quanah Creek's east bank and a second concentration 100 m to the south. A small number of flakes and one whiteware fragment was observed scattered between the two concentrations. Cobbles of quartz (milky and clear/gray) found along Quanah Creek's bed are a potential source for some of the lithic material worked on this site.

Site 34Cm-467 is tucked between the granite base of Quanah Mountain and Quanah Creek, affording very little area in which to place shovel tests. However, three tests were excavated outside of the firebreak. Two of the tests, between the firebreak and mountain, were sterile. The third, placed between the firebreak and creek, recovered two quartz fragments of very doubtful cultural origin. This test reached 80 cm, but this area appears to contain soils graded off the surface of the firebreak and deposited next to the creek. The area encompassed by the site is estimated to be approximately 4,100 m² (Figure 31).

Located 250 m south of site 34Cm-467 along the firebreak is site 34Cm-474, another lithic scatter of similar composition. Site 34 Cm-479 occurs approximately 100 m beyond 34Cm-474, and site 34Cm-490 is located across a drainage from 34Cm-479. Site 34Cm-455 is located about 50 m south of 34Cm-479, outside of the firebreak, while site 34Cm-320, another Plains Village site, is located within the firebreak on the eastern side of Quanah Mountain. All of these sites are characterized as low to moderate density lithic scatters with tool types dominated by utilized or marginally modified flakes. Raw material types are predominantly chert and quartz. Tool types and raw material types are also similar to other slope-base prehistoric sites located on the Fort Sill Military Reservation.

Prehistoric Artifacts

The collected artifact assemblage from 34Cm-467 is composed of two bifaces, four unifacially modified flakes, one tertiary flake, nine flake fragments, and 15 angular fragments from the surface of this site, and two angular fragments from one shovel test. Additional chert and quartz flakes and angular fragments were observed on the surface but not collected.

Surface

An aborted biface of dusky red Alibates was collected from the surface of this site. Measuring 3.5 cm x 2.1 cm x .8 cm and weighing 4.9 g, this artifact has a number of imperfections in the stone and has a fracture along one lateral edge, both of which probably contributed to the abandonment of this piece. No trimming or retouch is evident along any edge.

The second biface collected from this site is a fragment of a quartz biface. Measuring 2.5 cm x 1.2 cm x .7 cm and weighing 1.8 g, all that remains of this biface is one end and a small portion of the adjoining lateral edges. A few small flakes have been removed from the edge, but it is difficult to tell if this is from intentional retouch or the result of use.

Four unifacially modified flakes were recovered from the surface of this site. The first is the distal end of a snapped flake with a small amount of retouch along one lateral edge. The blank for this specimen is a thin flake of light reddish brown Alibates chert measuring 2.1 cm x 1.9 cm x .4 cm and weighing 1.3 g.

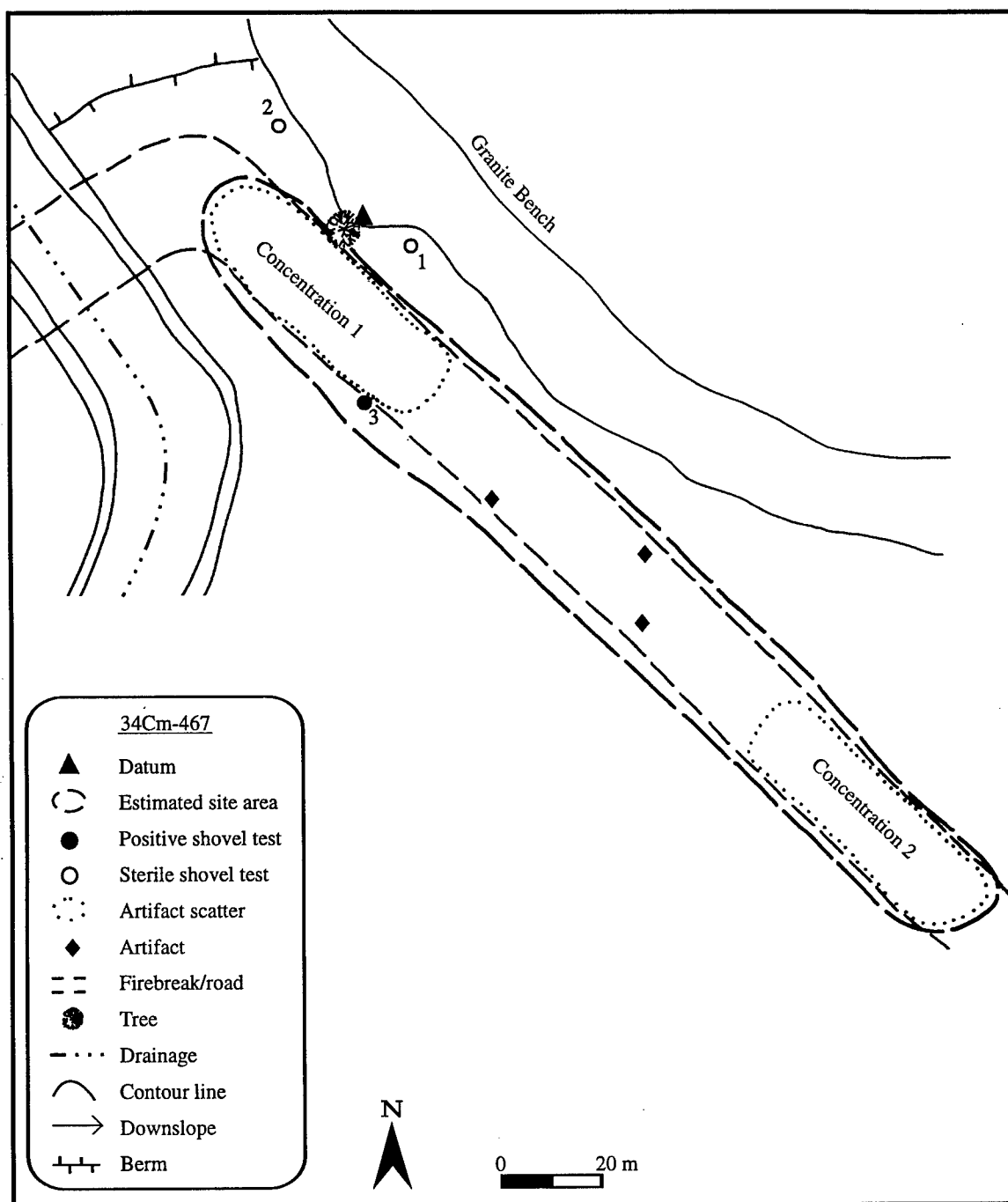


Figure 31. Plan map of 34Cm-467 (92-101).

A second modified flake is made of the same type of Alibates chert but does not conjoin with the first. This piece is the proximal end of a snapped flake with a small amount of retouch along one lateral edge. The measurements of this artifact weighing .5 g are 1.9 cm x 1.6 cm x .2 cm.

1992-1993 Cultural Resources Inventory: Fort Sill, Oklahoma

A snapped flake of pink Alibates chert was modified with a deep, narrow notch chipped into the lateral edge of its proximal end. This artifact measures 2.6 cm x 1.8 cm x .6 cm, with a weight of 2.25 g. The fourth modified flake is a piece of dark gray rhyolite with a wide shallow notch trimmed into its proximal end. This artifact measures 2.9 cm x 2.1 cm x .5 cm and weighs 3.0 g.

Lithic debris collected from the surface of this site consists of one tertiary flake of Ogallala quartzite, four flake fragments of Alibates chert, four quartz flake fragments, and 15 pieces of quartz angular fragments. Three flakes are less than 1 cm in size, while the other six are between 1 cm and 2 cm. Six of the angular fragments range from 1 cm to 2 cm, six are from 2 cm to 3 cm, and three are from 3 cm to 4 m.

Shovel Test 3, Level 4 (60 to 80 cm bs)

Shovel Test 3 yielded one quartz angular fragment from Level 2 (20 to 40 cm bs) and a second quartz angular fragment from Level 4 (60 to 80 cm bs). Both fragments are of doubtful cultural origin. One piece is 1.0 cm long and the second is 2 cm long.

Historic Artifacts

One historic ceramic white-white ware (1890-1990) fragment was recovered from the surface. No historic artifacts were recovered from a subsurface context at this site.

Summary

While this site and other similar sites aid in our understanding of the prehistoric utilization of the Wichita Mountains region, inventory of this type of site is sufficient for research purposes. There is little evidence that any of these upland slope-base sites contain significant subsurface deposits, and it is doubtful that they ever were more than surface scatters. No further work is recommended for this site, and it is not recommended for inclusion in the NRHP.

34Cm-473 (92-108)

This site consists of a lithic scatter located on a gentle slope of a deeply dissected, upland ridge. Intermittent drainages are located on the eastern and western edges of the site area. The soil type for the area is mapped as granite cobbly land. Site elevation is 402 m (1,320 ft) amsl, and vegetation observed in the area of the site consisted of post oak, blackjack oak, black locust, low growing scrubs, sparse grasses, and wildflowers.

This site consists of a very low density scatter of lithic artifacts observed over an moderately extensive area. Eight shovel tests were excavated; all were sterile. The deepest test was only 10 cm deep, with gravel, rock, and the extremely compact sediments precluding any deeper penetration. Shovel tests were not dug west of the dirt road because of a lack of soil. Extensive survey was conducted upslope from the site area, at the crest of the ridge. Even with excellent ground exposure this investigation failed to locate any additional cultural material. Total site area is estimated at 3,800 m² (Figure 32).

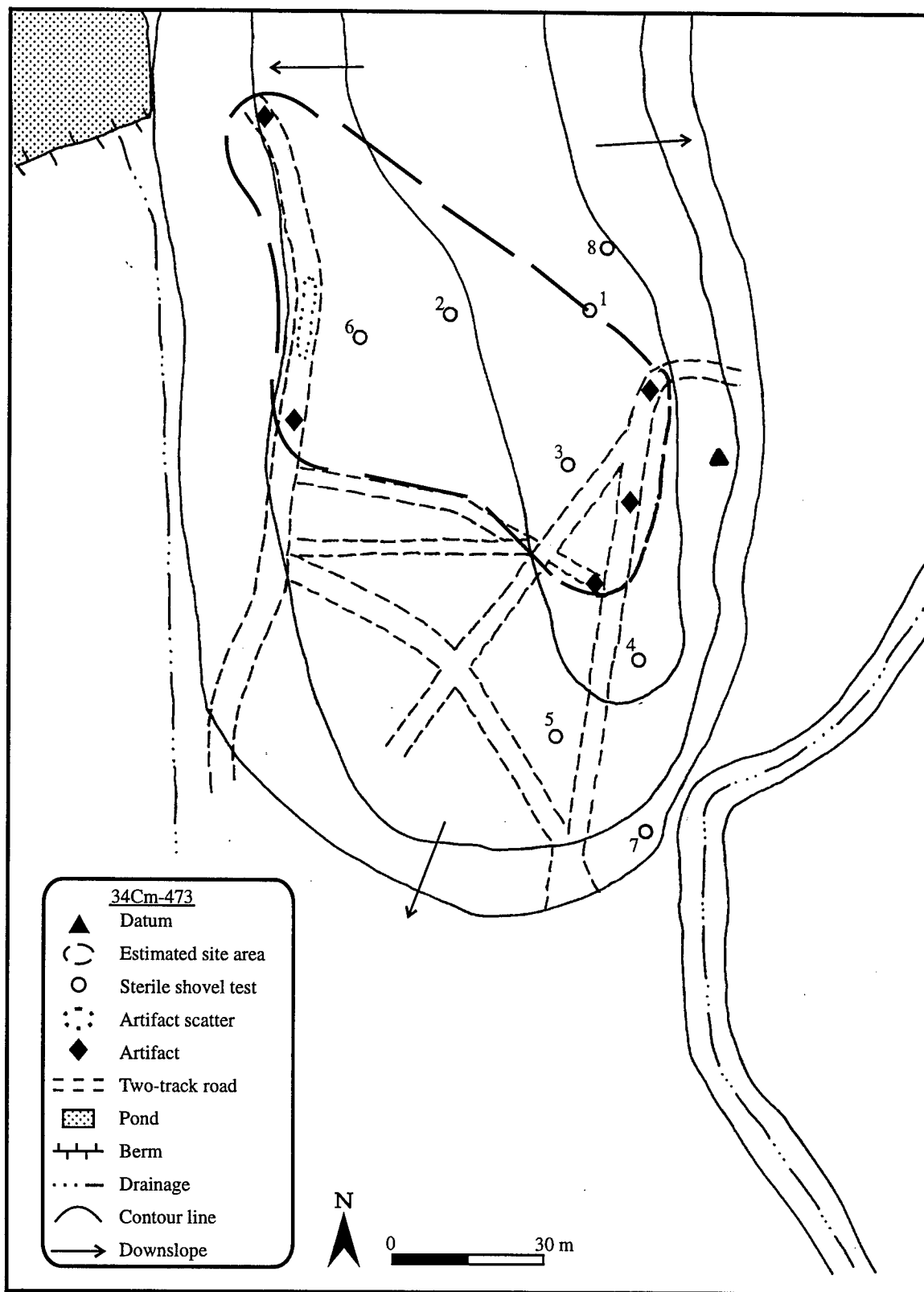


Figure 32. Plan map of site 34Cm-473 (92-108).

Prehistoric Artifacts

The lithic assemblage collected from the surface of this site includes a chalcedony biface, a chert core, five flake fragments, and one angular fragment. Quartz debris was observed on the surface of this site but was not collected.

The only formal tool observed at this site is a small, nearly circular biface (Figure 33) measuring 2.4 cm x 2.1 cm x .8 cm and weighing 3.15 g. There is the remnant of a stem at one end, approximately 20° off center from the long axis of this item. This stem appears to have been fractured by an ill-placed blow while preparing a side notch. The only retouch on this specimen is along the edge opposite to the impact fracture on the stem. This item may represent an aborted projectile point, but the shape also suggests a small, hafted cutting tool. The raw material is similar to Tecovas chalcedony (N7).

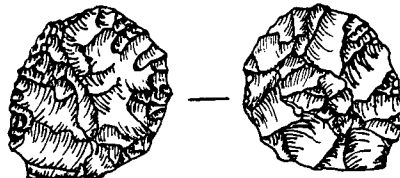


Figure 33. Diagnostic lithic artifact recovered from 34Cm-473 during the 1992 survey: biface made from material similar to Tecovas chalcedony. (Scale 1:1)

The core from this site is also similar to Tecovas chalcedony. This artifact measures 5.0 cm x 4.5 cm x 3.2 cm, and weighs 109.1 g. A small amount of the original cortex is still attached, while the flaked surfaces have varying degrees of patina.

The five flake fragments that were collected from this site consist of one Ogallala quartzite flake, three quartz flakes, and one Tecovas chalcedony flake. Three of these flakes are less than 1 cm in length, one is between 1 and 2 cm, and the third is greater than 3 cm long.

The angular fragment collected from this site is a badly fractured cobble of dusky red jasper or chert. While there is no evidence for cultural modification of this item, it was probably brought to this site and later abandoned due to the many flaws. This cobble measures 7.0 cm x 3.8 cm x 2.8 cm and weighs 69.5 g.

Summary

The site area has been subjected to a considerable amount of sheet erosion, accelerated by the extensive military traffic that crosses the site area. The area has been heavily disturbed by tracked vehicle, MRE packaging, and expended blanks. No subsurface archeological deposits were observed and, based on the limited surface sediments remaining on this low ridge, none are expected. No further work is recommended for this site based on its lack of integrity, limited quantity of material observed, and low research potential. This site is not recommended for inclusion in the NRHP.

34Cm-474 (92-109)

The site is a moderate density lithic scatter observed in the firebreak located along the southwestern portion of the base of Quanah Mountain. The site is located at an elevation of 405 m (1,330 ft) amsl. The soil in this area is mapped as Port loam, but observations indicate that the soil type is granite cobbly land and stony rock land. The vegetation in the area is dominated by post oak, with some blackjack oak upslope from the firebreak.

Most of the lithic artifacts observed and collected from this site, including a biface tip and a biface fragment, are of quartz. No diagnostic items were encountered. Nine shovel tests were excavated downslope from the firebreak; all were sterile. No shovel tests were placed upslope from the firebreak due to the lack of surface sediments. The site's area has been estimated as approximately 5,500 m² (Figure 34).

Prehistoric Artifacts

The artifact assemblage collected from the surface of this site is composed of two biface fragments, two utilized flakes, and 38 pieces of lithic debris. Additional quartz debris was observed on the ground surface but was not collected.

Tools

The edge fragment of a chert biface was collected from the surface of the site. This artifact was made from a high quality chert that apparently was not retouched after initial flaking. The numerous chips and flakes along its edge appear to have resulted from use rather than manufacture. This piece measures 3.0 cm x 1.3 cm x .8 cm and weighs 2.65 g. The raw material for this specimen is a very dark gray (10YR 3/1) chert with a very fine texture and satin luster, which is translucent to 2 mm.

The second biface fragment from this site is a quartz preform with a medial fracture. Relatively thin when abandoned, this tool appears to have been fractured during a failed attempt to further thin the biface. This artifact measures 4.3 cm x 3.9 cm x 1.0 cm and weighs 14.9.

An oolitic chert flake has had both lateral edges steeply chipped into a scraper-like bit. While both the distal and proximal ends have snapped off, enough of the proximal end remains to indicate that it was modified, with this portion of the original flake possibly having been the bit of an end scraper. The measurements of this artifact are 2.0 cm x 2.0 cm x .6 cm, and the weight is 2.75 g.

The last tool collected from this site is a quartz flake fragment with one edge battered from use. The distal, proximal, and opposing lateral edge of this flake have been fractured. The remaining edge and flake body have dimensions of 1.8 cm x 1.5 cm x .5 cm and a weight of 1.7 g.

Lithic Debris

Two tertiary flakes were collected from this site, both with the distal end of the flake missing. One of the sample is a large quartz flake 3.1 cm long; the second is an Alibates chert flake that measures 1.4 cm in

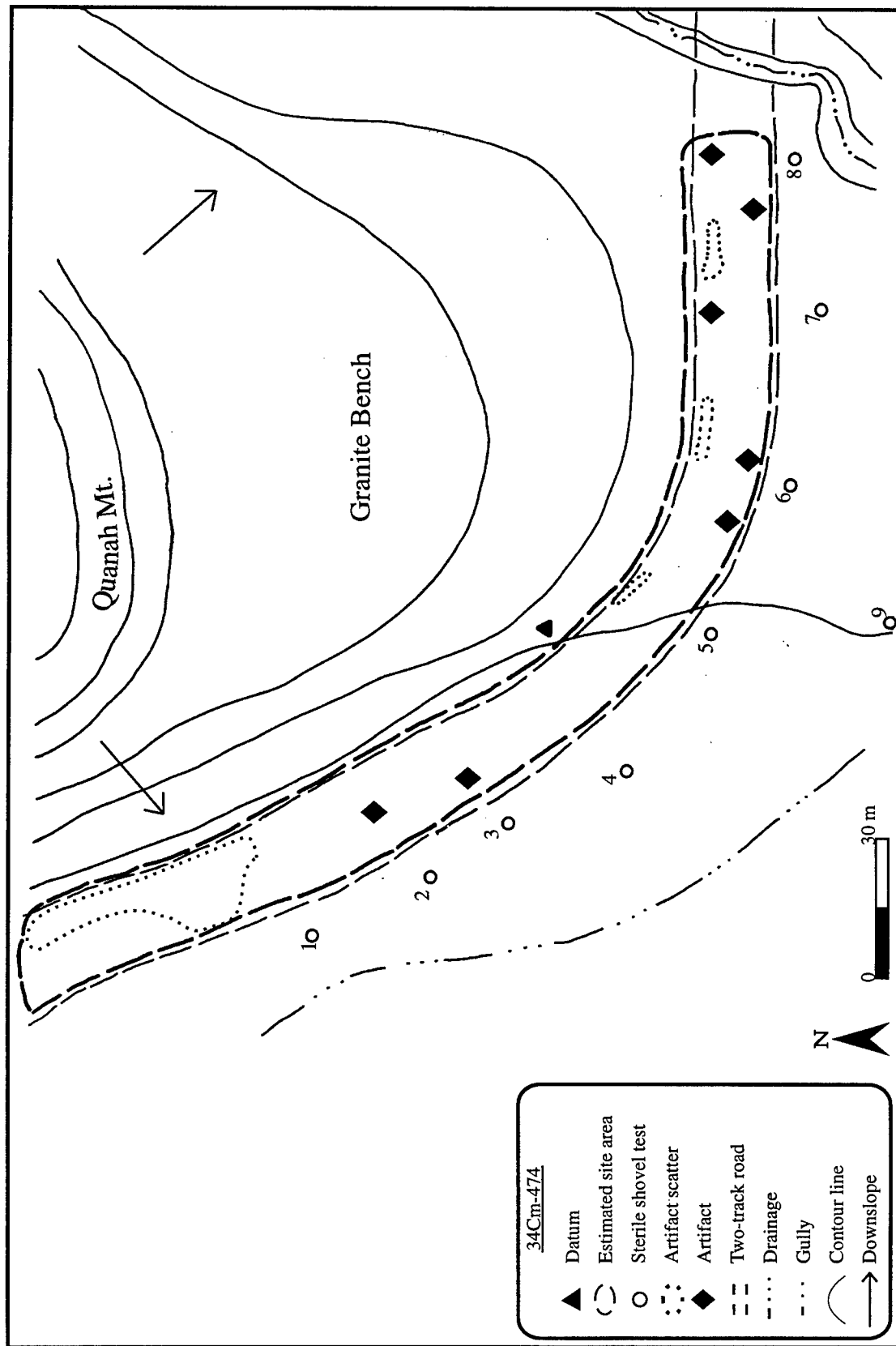


Figure 34. Plan map of site 34Cm-474 (92-109).

length. Nine flake fragments were collected. Two are less than 1 cm in size, six are between 1 and 2 cm, and one is between 2 and 3 cm. Twenty-seven angular fragments were collected, two ranging in size from 1 cm to 2 cm, 14 between 2 and 3 cm, nine between 3 and 4 cm, and two fragments larger than 5 cm in length.

Summary

While this site and other similar sites aid in our understanding of the prehistoric utilization of the Wichita Mountains region, inventory of this type of site is sufficient for research purposes. There is little evidence that any of these upland slope-base sites contain significant subsurface deposits; it is doubtful that they ever were more than surface scatters. No further work is recommended for this site, and it is not recommended for inclusion in the NRHP.

34Cm-479 (92-114)

This site manifests a moderate density lithic scatter observed in the firebreak located at the base of Quanah Mountain. Soil in this area is mapped as granite cobbly land; elevation at the site is 411 m (1,350 ft) amsl. Vegetation observed in the area of the site consisted of post oak, blackjack oak, pecan, sumac, mixed grasses, wildflowers, greenbrier, and poison ivy.

The lithic artifacts observed at this site were manufactured from chert, quartzite, and quartz. Tools collected included from the site surface included a Washita arrow point, two biface fragments, one scraper, and ten utilized/modified flakes. Thirteen shovel tests were excavated and all were sterile. The depths of the shovel tests were from 3 cm to 26 cm.

Prehistoric Artifacts

The artifact assemblage collected from this site includes one arrow point, two biface fragments, one scraper, five unifacially modified flakes, and 24 pieces of lithic debris. In addition, chert and quartz lithic debris was observed on the ground surface but not collected. The site encompasses an estimated 3,500 m² (Figure 35).

Tools

Bifaces

A Washita arrow point made from a light gray (N7) chert was collected from this site (Figure 36a). This tiny point was made on a flake and is slightly curved in cross section. Its measurements are 1.4 cm x 1.0 cm x .15 cm, and its weight is .25 g. The chert is fine-textured and has a dull to satin luster and a translucency of more than 1.5 mm.

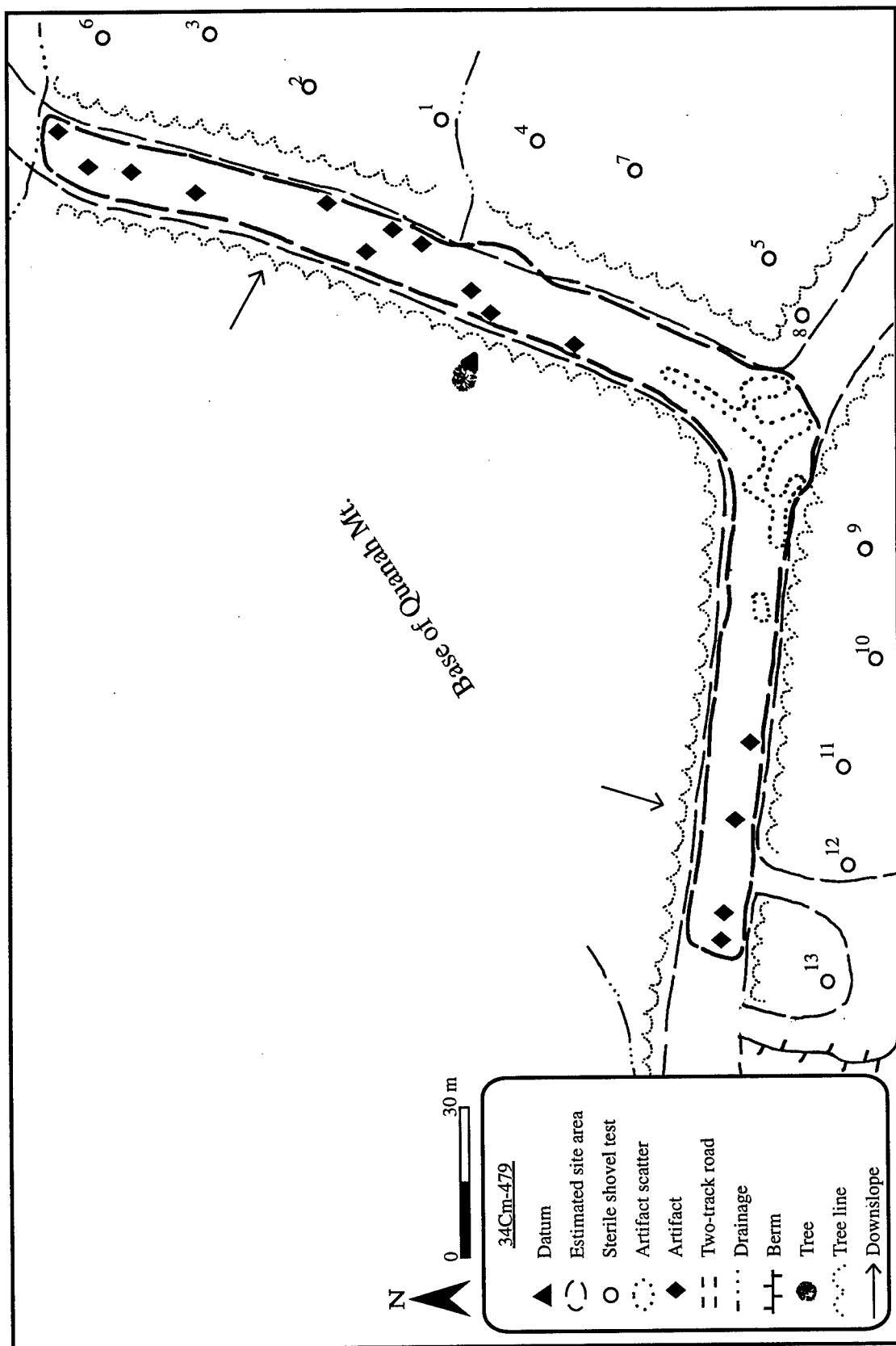


Figure 35. Plan map of site 34Cm-479 (92-114).

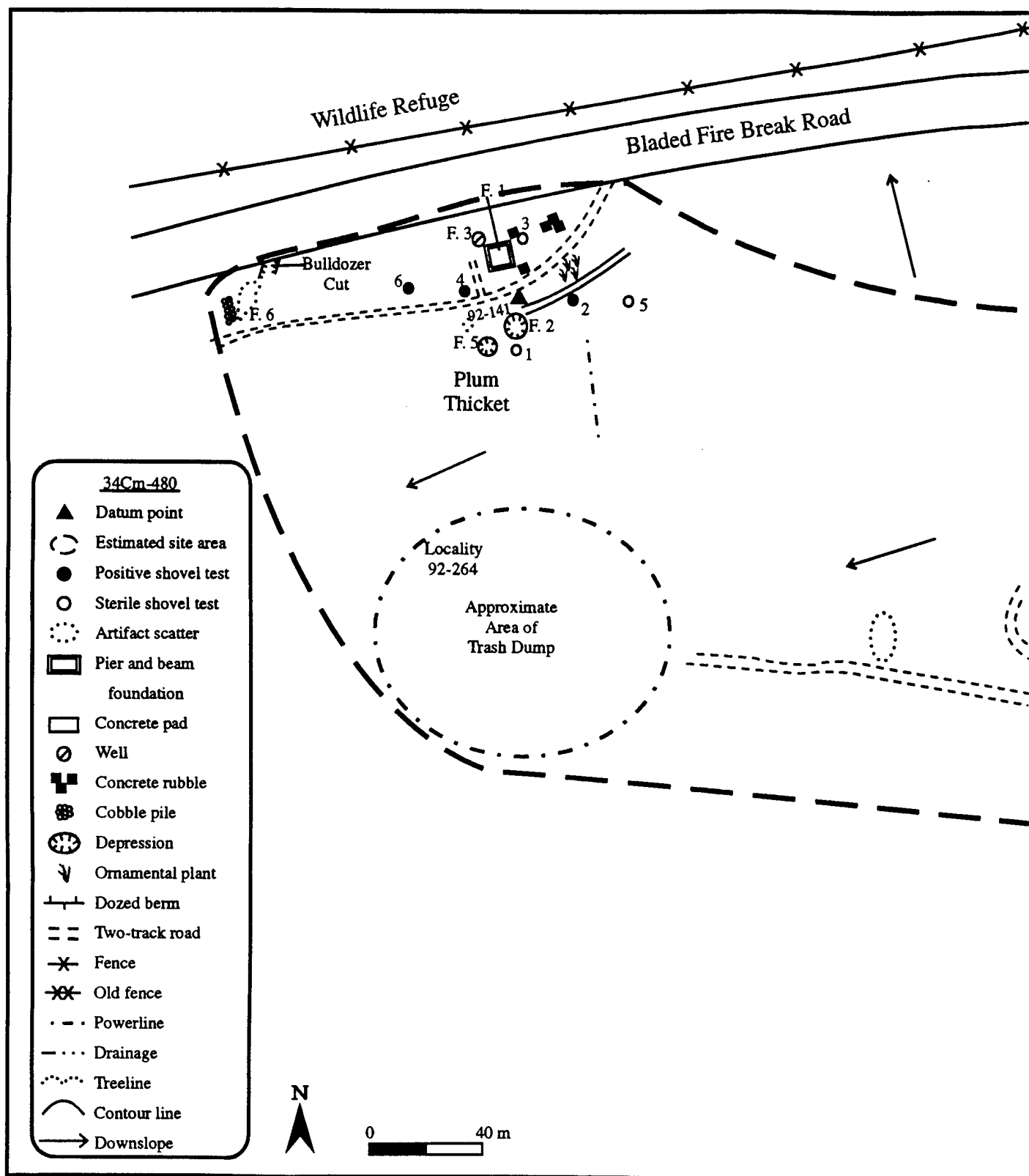
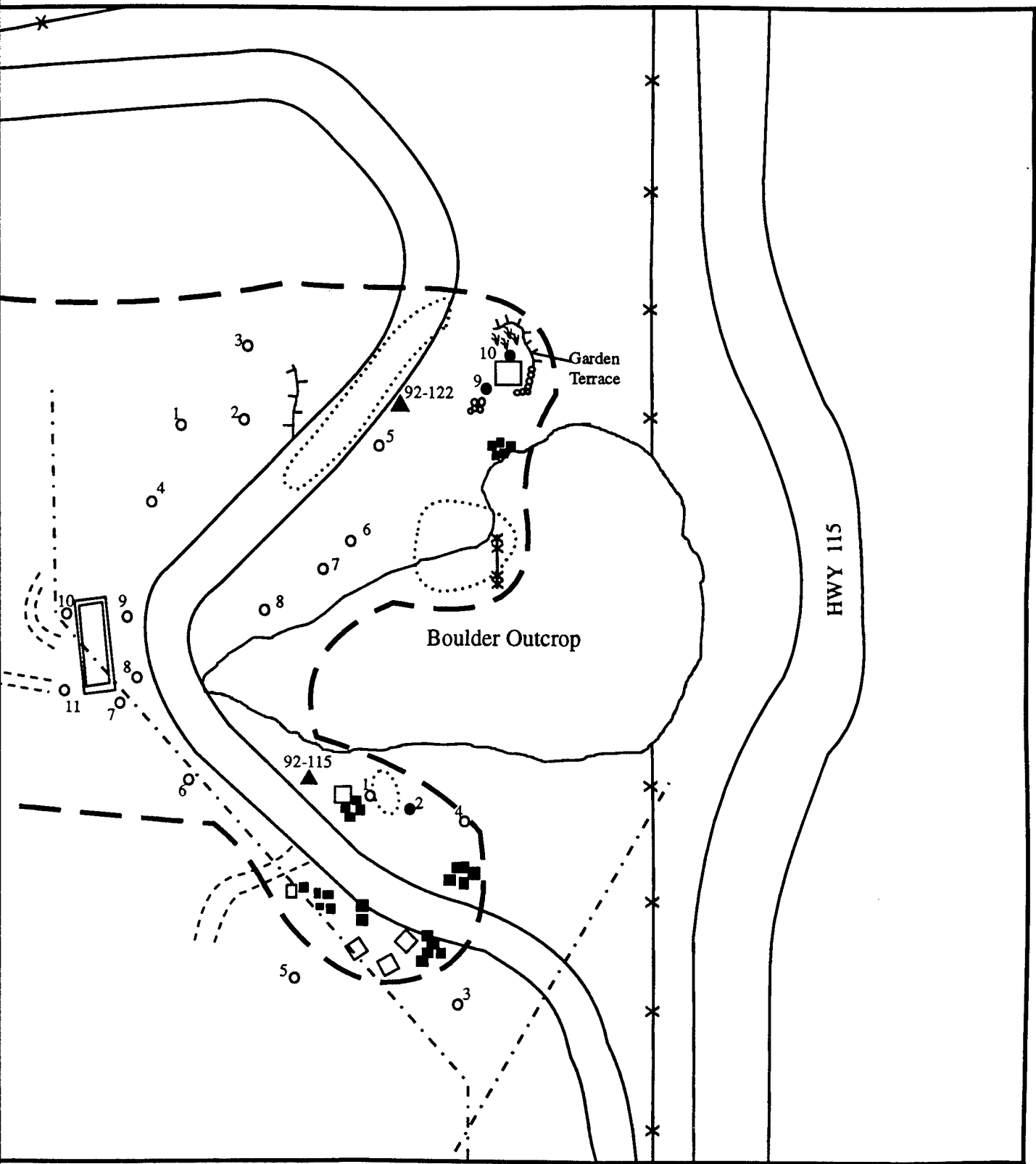


Figure 34. Plan map of site 34Cm-480 (92-115): Wisely Saloon and Cabins.



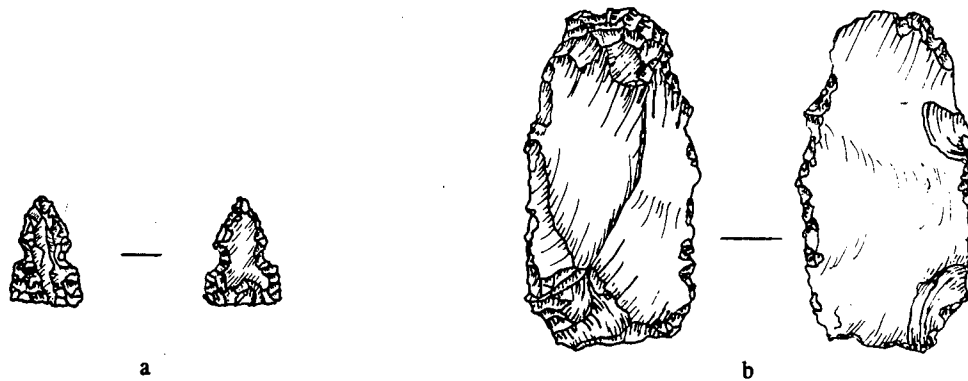


Figure 36. Diagnostic lithic artifacts recovered from 34Cm-479 during the 1992 survey: (a) chert Washita arrow point; (b) Alibates chert end scraper. (Scale 1:1)

Also collected was a biface fragment of Edwards chert. This fragment exhibits a tang that resembles that of an Ensor point, but it is also possibly a drill fragment. This piece measures 1.7 cm x 1.3 cm x .5 cm and weighs .9 g.

The midsection fragment of a quartz biface was also collected. The extant fragment measures 3.6 cm x 2.2 cm x .7 cm and weighs 5.5 g.

Unifaces

A large, thick tertiary flake of Alibates (5R 4/2) chert has been modified into an end scraper (see Figure 36b). The proximal end of the flake has been steeply chipped to form a scraper-like bit. The distal end has been trimmed and exhibits some damage but does not appear to have been modified as a working edge. Both lateral edges have been unifacially retouched. One edge has been modified on the dorsal surface, while the opposite edge was modified on the ventral surface. All edges exhibit varying degrees of use wear. This artifact measures 4.4 cm x 2.3 cm x .9 cm and weighs 10.0 g.

Five unifacially modified flakes were collected from this site. The first is a tertiary Ogallala quartzite flake with retouch along one lateral edge. Both the distal end and opposite lateral edge of the flake are fractured. The dimensions of the remaining fragment are 2.5 cm x 2.2 cm x .6 cm with a weight of 3.5 g. The satin luster and reddish tint of this piece possibly indicate heat-treatment.

The second unifacially modified artifact is a chert flake fragment that exhibits parallel flake scars along its dorsal surface. This artifact is too fragmentary to tell whether if it was modified for use as a tool or if it is part of a larger, bifacially worked tool. No worked or utilized edge remains. The raw material is a grayish brown (10YR 5/2) chert that has a fine texture, semi-glossy luster, a small amount of chertified shell fragment inclusions, and translucency to 3 mm. The measurements are 2.3 cm x 1.6 cm x .4 cm, and the weight is 1.55 g.

The third unifacial tool consists of the medial section of a tertiary flake fragment with heavy use wear on both lateral edges. This piece is made from a very pale brown (10YR 8/2) chert that has a fine texture, dull luster, black shell fragment inclusions, and is opaque. The dimensions of this artifact are 1.6 cm x 1.6 cm x .4 cm with a weight of 1.1 g.

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The fourth unifacially modified artifact is a fragment of a thick secondary flake of very pale brown Edwards chert. Three edges have been steeply fractured, with one edge exhibiting heavy use wear and possibly some intentional modification. The fourth edge is partially worn cortex with only a few deep pits of the original cortical surface remaining. This piece measures 3.0 cm x 2.1 cm x .9 cm and weighs 6.7 g.

The final tool from this site is a quartz flake fragment with modification along one edge. A series of retouch flakes were removed from the ventral surface of this edge, while all other edges have been fractured. This piece measures 1.7 cm x 1.6 cm x .4 cm and weighs 1.4 g.

Lithic Debris

The lithic debris collected from this site includes a tertiary Edwards chert flake and a quartz tertiary flake, both in the 1 cm to 2 cm size range, and a broken tertiary flake of pale brown chert in the 2 to 3 cm range. Eleven flake fragments were collected, consisting of one Edwards chert flake, four quartz, and six flakes of other cherts. Size ranges for nine of the sample are between 1 and 2 cm, one between 2 and 3 cm, and one between 3 and 4 cm.

Ten angular fragments were collected, with one piece of Edwards chert, three of other cherts, two Ogallala quartzite, and four quartz fragments. Size ranges for six of these items are between 1 and 2 cm, three between 2 and 3 cm, and one between 3 and 4 cm.

Summary

While this site and other similar sites aid our understanding of the prehistoric utilization of the Wichita Mountains region, inventory of this type of site is sufficient for research purposes. There is little evidence that any of these upland slope-base sites contain significant subsurface deposits, and it remains doubtful that they ever were more than surface scatters. No further work is recommended for this site, and it is not recommended for inclusion in the NRHP.

34Cm-480 (92-115): Wisely Saloon and Cabins

This site consists of four locations originally recorded as sites 92-115, 92-122, and 92-141, and locality 92-264. Local informants have indicated that these sites are the location of a saloon (believed to have been named "Rose Mountain Saloon"), rental cabins, a dining hall, and private home, all originally belonging to one Frank Wisely. These three sites and the locality have been condensed into one site under the field designation 92-115 and are discussed below under their original field numbers. The combined site area is 120,000 m² (Figure 37).

The elevation of this site ranges from 424 m (1,390 ft) amsl at the western edge to 432 m (1,420 ft) amsl at the cabins and saloon. The soil in this area is mapped as granite cobbly land. Vegetation observed in the area of the site consisted of post oak, blackjack oak, juniper, long stem bunch grass, greenbrier, and poison ivy. While some portions of the site have a thick vegetative cover, much of the area has a moderately dispersed stand of small blackjack oaks with sparse grasslands. The tops of the small ridges and hills that are found in this dissected upland support little or no soil or vegetation.

92-115 - Cabins and Dining Hall Area

This portion of the site contains both a historic component east of the firebreak and a prehistoric lithic scatter in the firebreak and a bulldozer berm west of the firebreak. The lithic scatter consists of flakes made of quartz, chert, and quartzite. A scraper was found along the dozer berm.

A group of concrete foundations is located to the west and south of a granite hill (Rose Mountain). The concrete slabs are 5 m x 5 m with steel sill bolts at the edges. There are five intact slabs and six concrete rubble piles that are the remnants of slabs bulldozed when the firebreak was constructed through the center of the site.

A concrete pier-and-beam foundation (34 m x 7 m) with interior concrete footings is located at the northern end of this concentration of foundations to the west of the firebreak. This structure is the dining hall that was associated with the cabins. Two historic dumps are located downslope (40 m west) from this foundation. Artifacts contained within these dumps are what would be expected from a commercial food operation, such as large, commercial-sized food cans and storage bottles, condensed milk cans, and kerosene cans.

A scatter of historic artifacts located south of Rose Mountain and east of the firebreak consists of window glass, vessel glass, metal, and ceramics fragments. Seven shovel tests were excavated in this area, with only one test containing historic artifacts. The shovel tests indicated the presence of silty sand surface sediments no deeper than 13 cm, followed by a gravelly red clay horizon. This concentration's area is 43,200 m².

Prehistoric Artifacts

The prehistoric assemblage collected from the surface of this area of site 34Cm-480 consists of a large end scraper, a modified flake, and a flake fragment. Seven chert flakes, two quartz flakes, three quartz angular fragments, and one quartzite flake were observed on the ground surface within the firebreak but were not collected.

The end scraper is made from a large Tecovas (5YR 3/4) quartzite secondary flake (Figure 38). The proximal end of the flake has been snapped off and the distal end has been steeply chipped into a scraper bit. Neither lateral edge has been modified. The dorsal surface of this specimen has approximately 20 percent cortex remaining on its surface. The cortex is smooth and worn, indicating that the raw material was obtained from a secondary deposit and not from the source outcrop.

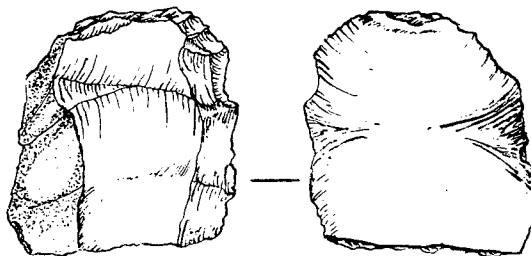


Figure 38. Diagnostic lithic artifact recovered from 34Cm-480 during the 1992 survey: Tecovas quartzite end scraper. (Scale 1:1)

An irregularly shaped chert flake has had a portion of one lateral edge unifacially modified into a shallow notch 6 mm wide by 1.5 mm deep. The overall dimensions of this piece are 3.2 cm x 1.6 cm x .4 cm, with a weight of 1.65 g. The chert type has a very fine-grained texture, has a satin luster, is translucent to 1 mm, and mottled light gray (10YR 7/2) to light brownish gray (10YR 6/2). The third specimen is an Alibates chert flake fragment measuring less than 1 cm in size.

Historic Artifacts

Historic material was collected from the surface and from one shovel test. The shovel test yielded one unidentifiable metal artifact. Diagnostic glass artifacts collected from the surface included machine-made bottles (1910-1990), Owens-Illinois bottles (1929-1954), clear optic mold tableglass, clear glass tumblers (1880-1990; Figure 39a), and ash tint bottle fragments (1915-1990). Other glass material included a Knox Bottle Company whiskey bottle (1924-1968), a Pierce Glass Company medicine bottle (1905-1917; Figure 39b), aqua bottle fragments (1860-1990), and manganese solarized fragments (1880-1920). Milk glass material included fragments of white milk glass plates and cups with a floral molded design and green milk glass fragments (1920-1950). Three window pane fragments were also collected.

Diagnostic ceramics collected from the surface consisted of a decalcomania decorated semi-porcelain fragment (1895-1950), decalcomania decorated white-whiteware fragments (1895-1950), white-whiteware fragments (1890-1990), a bluish tint ironstone fragment (1850-1910), an ironstone-whiteware fragment (1840-1910), and an exterior/interior bristol stoneware fragment (1900-1990). Other material from the surface included a 'hole in top' tin can (1856-1920), a large blue painted kitchenware pot, lead pipe, graniteware coffee pot top, and a door latch. A MBD of 1903 is estimated for this portion of the site from the recovered diagnostic historic material.

92-122 - Rose Mountain Saloon

This historic component consists of a concrete foundation, a pile of concrete and cobble wall remains adjacent to the foundation, flower beds, and a dump. The foundation measures 7 m (N/S) x 10 m (E/W) and is more heavily built than the foundations at 92-115. A second pile of cobble and cement wall remains is 30 m south (190°) of the foundation. These foundation and rubble piles are the remains of the Rose Mountain Saloon. The historic dump consists mostly of beer cans (1930s to 1960s) and broken liquor bottles. Eight shovel tests were excavated on both sides of the firebreak and all were sterile. No shovel tests could be dug north or east of Shovel Test 10, due to the presence of granite outcroppings. This concentration covers 8,930 m².

Historic Artifacts

Two shovel tests at this site yielded three nondiagnostic artifacts. Diagnostic surface material collected consisted of a clear machine-made Owens-Illinois bottle (1929-1954), an ash tint bottle and tumbler (1915-1990), and pink Depression glass possibly the 'Coronation' pattern (1936-1940; Figure 40a). Two metal beer cans (Budweiser [1936; Figure 40b] and Pabst [1930]) and a 'hole in top' tin can top (1856-1920) were also recovered.

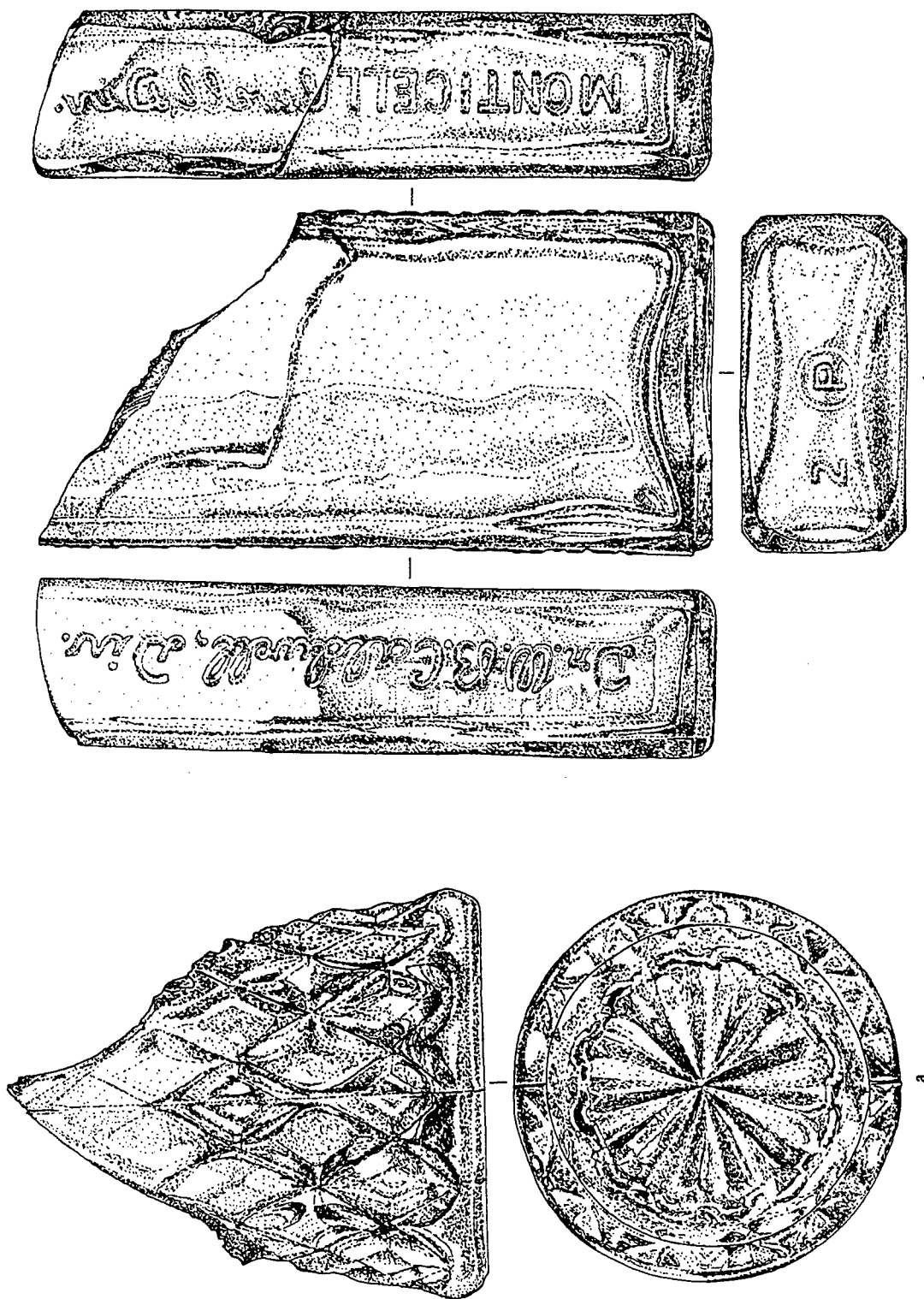


Figure 39. Selected historic artifacts from 34Cm-480 (found at the Cabins/Dining Hall Area): (a) clear glass tumbler; (b) Pierce Glass Company medicine bottle. (Shown at 90% of actual size)

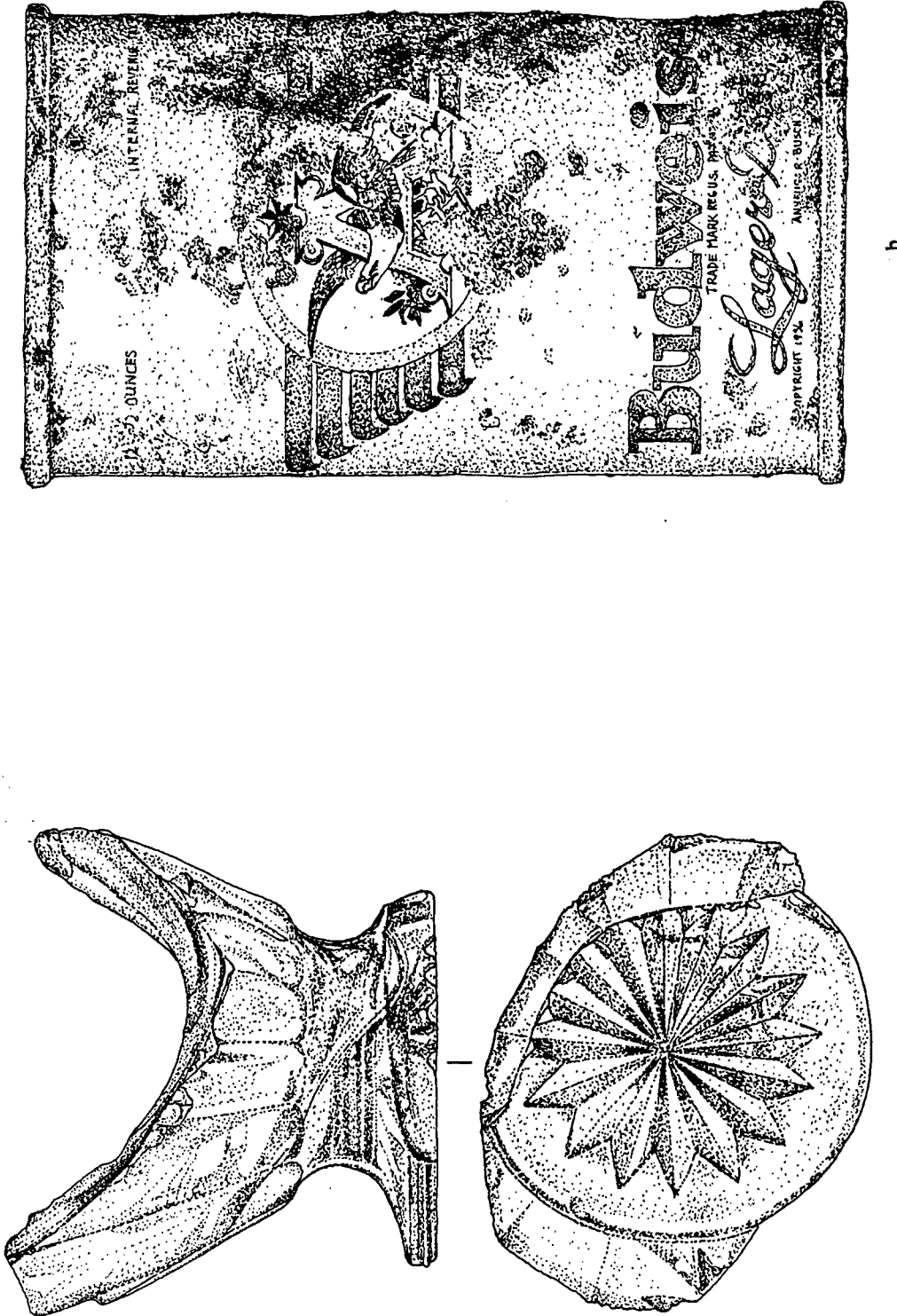


Figure 40. Selected historic artifacts from 34Cm-480 (found at the Rose Mountain Saloon): (a) possible "Coronation" Depression glass; (b) Budweiser beer can.
(Scale 1:1)

92-141 - Wisely House

This is the site of Frank Wisely's house. According to local informants, Frank Wisely was a Texas cattleman who later owned the Rose Mountain Saloon and associated rental cabins. The remains of an old power line (poles and wire) and the remnants of an old footpath that runs between this location and the saloon and cabins supports the reported association of these two areas.

This portion of the site contains six features. The first feature is a pier-and-beam concrete and granite cobble house foundation (9 m x 8 m x 32 cm). The second feature, a circular 4-x-4-m depression, is probably a cistern. The third feature is a 1-m diameter depression with granite cobbles in the bottom. It is only 1 m deep and is possibly a filled well. The fourth feature consists of five granite and concrete columns that were likely support columns for a porch, a carport, or were purely decorative in nature. Only one column is still in place, located 2 m east of the southeast corner of the house, while the other four are broken and scattered. All the columns are 40 cm wide; the tallest column is 90 cm tall and the shortest is 30 cm tall.

Feature five is a depression 100 cm x 50 cm x 50 cm deep encircled with rotting boards, possibly an outhouse. Feature six is a large trash dump, 12 m (N/S) x 6 m (E/W). A granite cobble fence, 15 m x 2 m, lies to the west of and slightly downslope from the trash dump.

Six shovel tests were excavated at this portion of the site, with one shovel test yielding a single piece of window glass. The shovel tests indicated a shallow sandy silt with gravel inclusions; 20 cm is the greatest soil depth observed. This concentration covers an area of 9,600 m².

Historic Artifacts

Historic material was recovered from the surface and from five shovel tests. Diagnostic artifacts recovered from the shovel tests consisted of one bluish tint whiteware fragment (1880-1930), pink Depression glass fragments (1920-1950), ash tint glass bottle fragments (1915-1990), and manganese solarized glass fragments (1880-1920). Diagnostic surface material consisted of a light ivory tint whiteware fragment (1920-1990), one white-whiteware fragment (1890-1990), a bluish tint whiteware fragment (1880-1930), purple Depression glass (1920-1950), and a tin hinged-top tobacco box (1910).

Locality 92-264

This locality consists of two trash dumps located along an unimproved dirt road, approximately 200 m downslope from the cabins and dining hall. The dirt road starts near the dining hall and runs downslope to the west. The historic artifacts were observed on an eroded ridge top and in a small upland drainage channel.

Material in this dump is similar to that found in the dumps behind the dining hall. Besides these two dumps there are also a number of other dumps in this area, which consist of glass fragments, tin cans, and ceramic fragments scattered on the small hills and ridges in the vicinity. Also observed, downslope from the cabins, are granite cobble fences. These fences and all the additional trash dumps were outside the current project area, so they were not closely examined.

Historic Artifacts

A large quantity of historic material was recovered from the surface at this locality (Figures 41 and 42). Manganese solarized (amethyst) glass (1880-1920) included tableware fragments, a cosmetic bottle (Figure 43), a pressed lamp base (Figure 44), and two hand-finished bottle lips. Ash tint glass consisted of a whole bottle and fragments (1915-1990), including an Owens-Illinois glass fragment (1954-1990). Other glass material included a selenium (1916-1930) cosmetic bottle, a fragment of pink Depression glass (1920-1950), and a clear machine-made bottle (1910-1990). Amber glass consisted of two machine-made bottle lips (1910-1990), a "Lysol" bottle from Brockway Glass Company (1925-1928), and a Hazel-Atlas bottle base (1920-1964). Historic ceramic fragments included Fiestaware (1936-1970), bluish tint ironstone (1850-1910), decalcomania decorated white-whiteware (1895-1950), and semi-porcelain tableware. Metal material included a dinner fork and a graniteware water pitcher. A MBD of 1902 is estimated for the locality based upon the recovered diagnostic historic material.

Summary

Site 34Cm-480 is a potentially significant site related to early twentieth century commercial and recreational activity. Attempts should be made to preserve what remains of this site. Further archival research, testing at the Wisely house, and a more complete survey of the western portions of this site (areas outside of the current project area) are need to fully assess this site's potential for inclusion in the NRHP.

34Cm-482 (92-117)

Site 34Cm-482 consists of a historic foundation and well located on the level upland east of Rock Creek. The foundation is approximately 25 m west of the steep bank that slopes approximately 10 m to the creek bottom. The soil type mapped for this area is Port loam, and site elevation is 390 m² (1,280 ft) amsl. Vegetation observed in the area of the site consisted of post oak, juniper, pecan, mesquite, elm, bois d'arc trees, sumac, wild plum, long stem bunch grass, and Johnson grass.

As mentioned above, the site contains two features. The foundation is a 2-m-x-6-m concrete slab with foundation bolts at the edges. The second is a collapsed mortared brick well that has a neck diameter of 80 cm and a lower portion of 107 cm. It has been capped with a concrete slab 82 cm in diameter, with a 10-cm hole in the center.

A large scatter of historic artifacts was found primarily in the northern and western halves of the site and downslope into the creek. Seven shovel tests were excavated at the site. Four of the shovel tests yielded historic artifacts; the remainder were sterile.

Also noted in the site area were three wire mesh tubes protruding from the ground surface along the upper edge of the creek bank. Approximately 66 cm long and 15 cm in diameter, these tubes are spaced approximately 5 m apart in shallow depressions (1-m diameter). These features are probably the result of saplings having been planted at this site, with the wire mesh serving to protect the young trees from rabbits. The site area is estimated as approximately 3,025 m² (Figure 45).

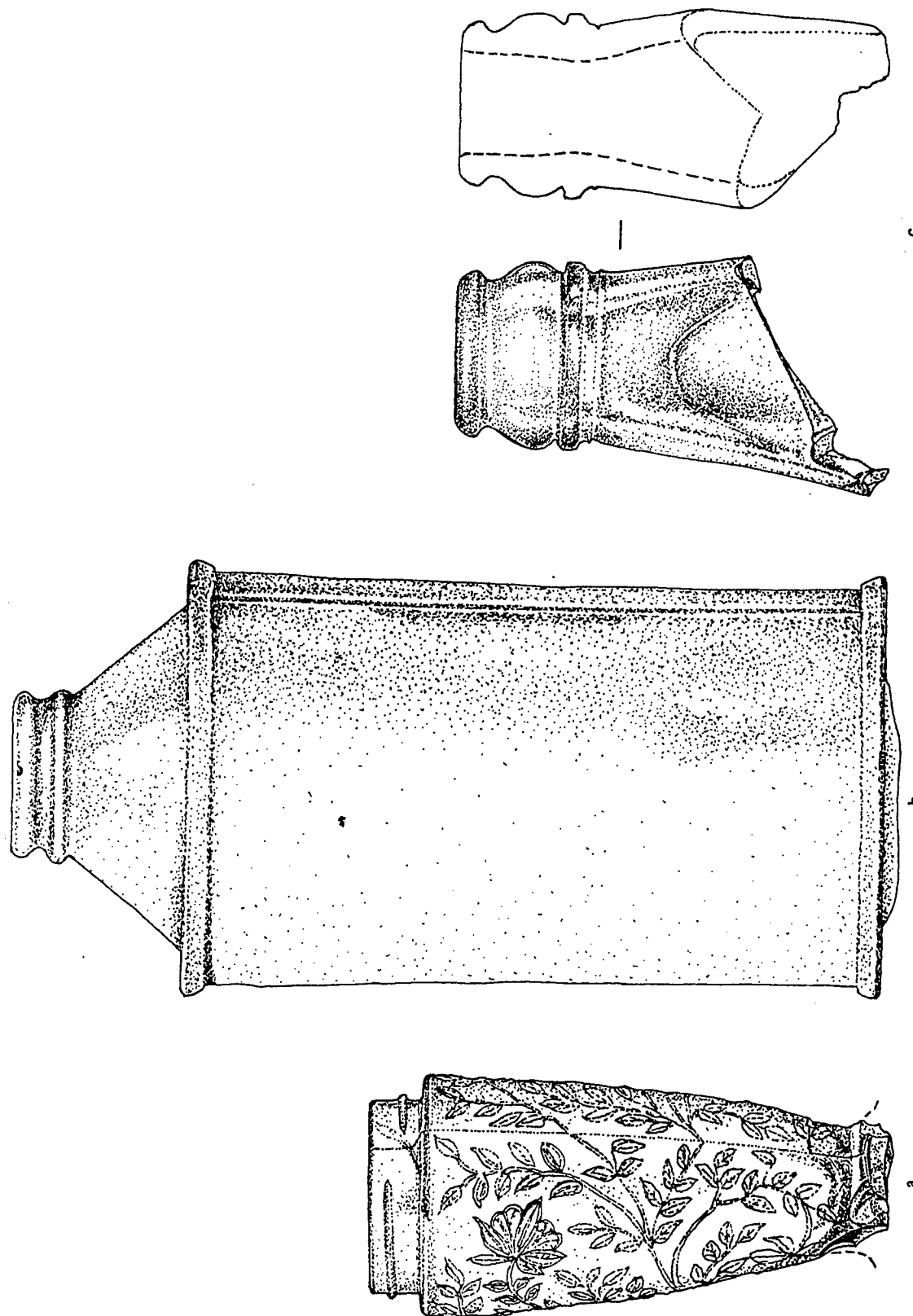


Figure 41. Selected historic artifacts from 34Cm-480 (from Locality 92-264): (a) Depression-era salt/pepper shaker; (b) early beer can; (c) early clear glass crown bottle lip. (Scale 1:1)

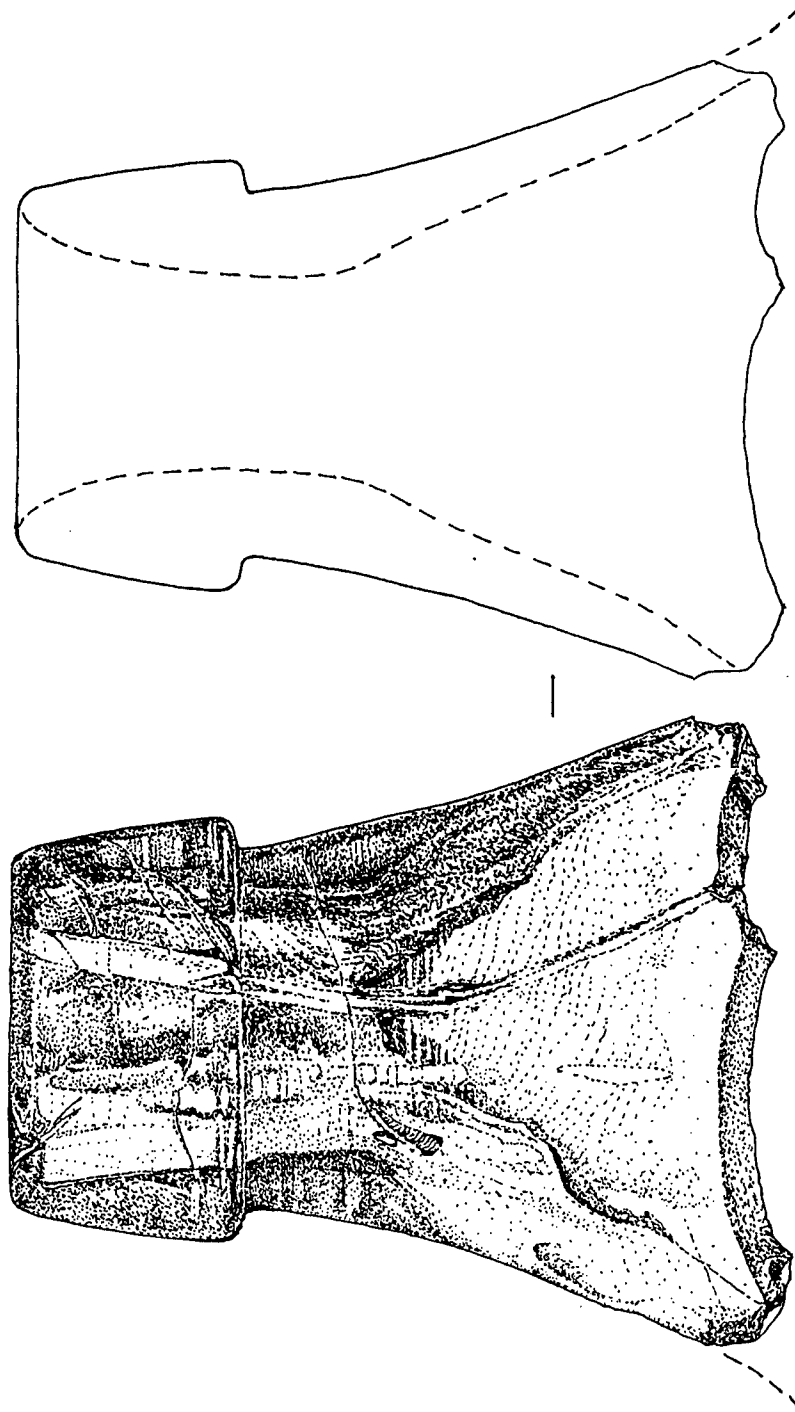


Figure 42. Selected historic artifact from 34Cm-480 (from Locality 92-264): large aqua demijohn bottle neck. (Scale 1:1)

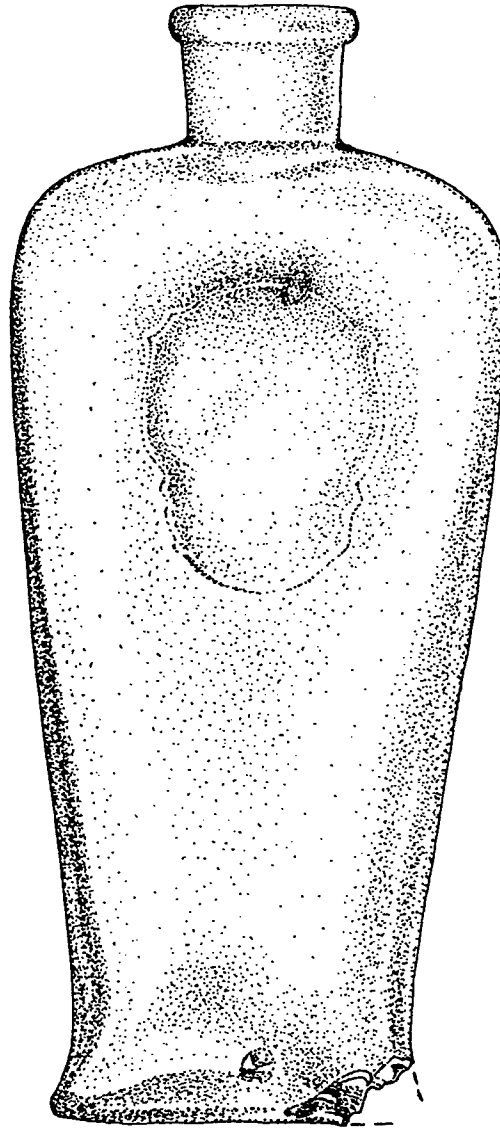


Figure 43. Selected historic artifact from 34Cm-480 (from Locality 92-264): frosted manganese solarized cosmetic bottle. (Scale 1:1)

Historic Artifacts

Historic material was collected from the surface and from four shovel tests at this site. Surface diagnostic ceramics consisted of a white-whiteware fragment (1890-1990), Fiestaware fragments (1930-1970), and a two-tone (albany and bristol) exterior/albany slip interior stoneware fragment (1890-1920). Diagnostic

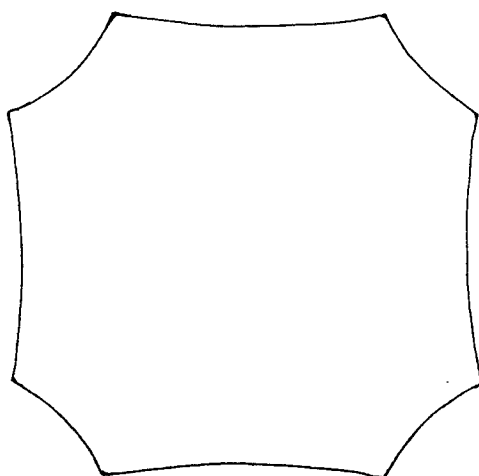
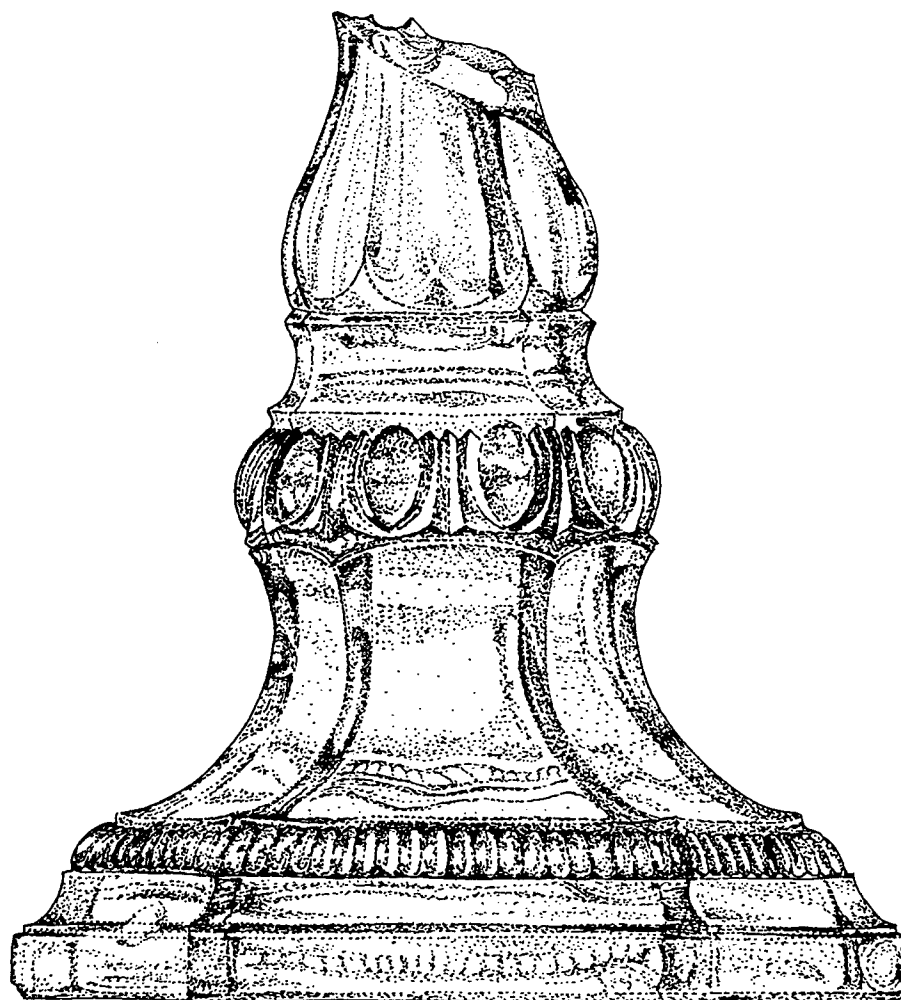


Figure 44. Selected historic artifact from 34Cm-480 (from Locality 92-264): manganese solarized pressed lamp base. (Shown at 90% of actual size; base outline shown at 45% of actual size)

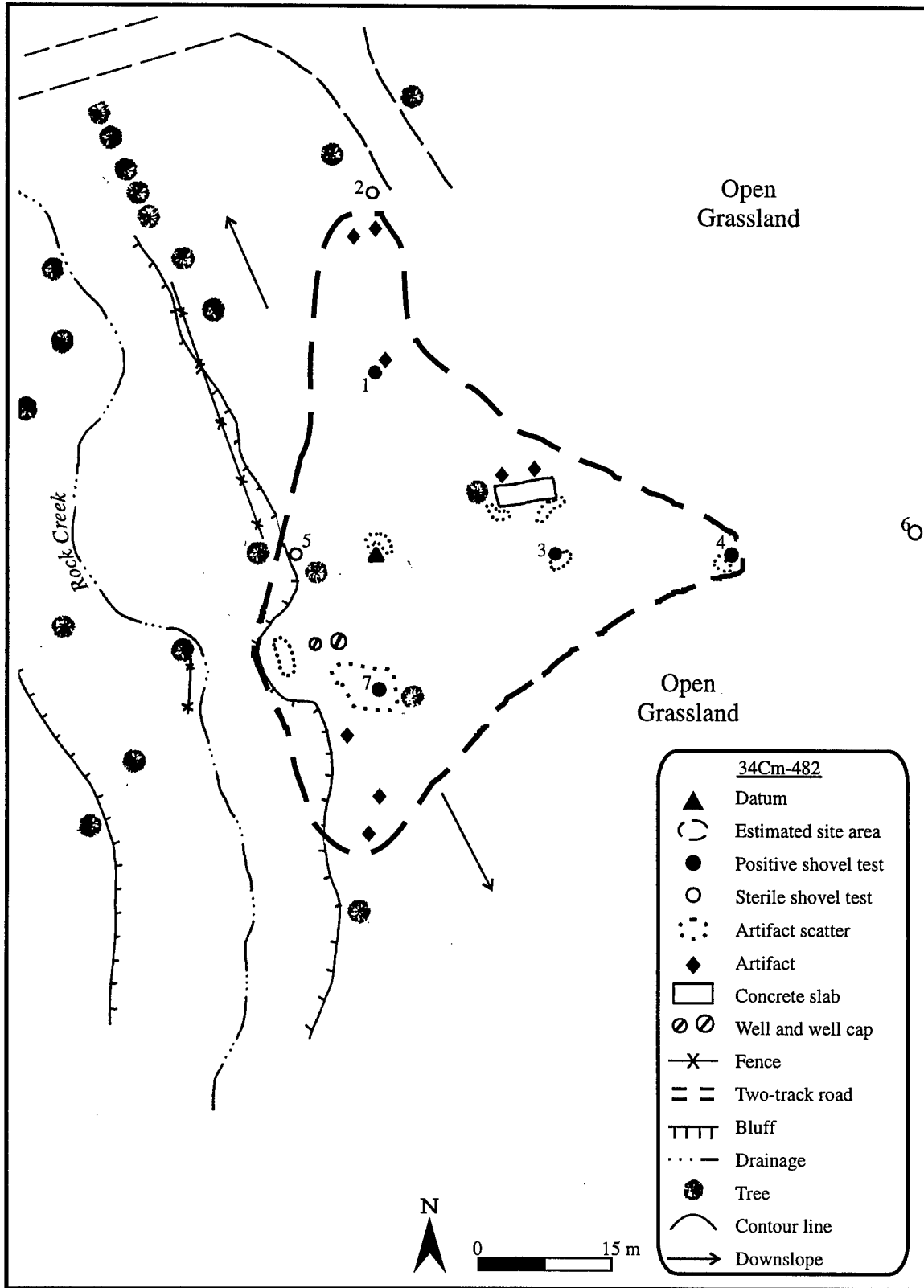


Figure 45. Plan map of site 34Cm-482 (92-117).

1992-1993 Cultural Resources Inventory: Fort Sill, Oklahoma

glass collected from the surface consisted of a manganese solarized fragment (1880-1920), ash tint tableware and bottle fragments (1915-1990), and a machine-made clear medicine bottle (1910-1990). Shovel test artifacts included a wire nail (1880-1990), ash tint bottle fragments (1915-1990), and clear lamp glass.

Summary

Additional archival research and further testing is needed to evaluate fully this site's potential for inclusion in the NRHP.

34Cm-483 (92-118)

Site 34Cm-483 consists of a low density lithic scatter observed in the southern boundary firebreak of Quanah Range (the firebreak runs north to south at this location). The material is scattered on a low upland ridge west of West Cache Creek, extending for 306 m along the firebreak. This small upland ridge extends to the southeast toward West Cache Creek, located 400 m east of the site. An old channel of West Cache Creek is only 150 m east of the site. The soil at this site is mapped as Port loam; site elevation is 390 m (1,280 ft) amsl. Vegetation observed in the area of the site consisted of bois d'arc, mesquite, and long and short stem bunch grass.

A wide scatter of chert, quartzite, and quartz flakes and shatter extends north and south along the freshly plowed firebreak. No diagnostic points or tools were noted. Ten shovel tests were excavated at this site, and all ten failed to yield cultural material. The greatest depth reached in a shovel test was 26 cm bs, revealing a soil matrix of silty sand. The site's area is estimated at 2,200 m² (Figure 46).

Prehistoric Artifacts

The artifact assemblage collected from this site consists of one marginally modified flake and seven pieces of lithic debris. An additional 27 pieces of lithic debris were observed on the surface of this site. One flake of Edwards chert has been modified with minimal retouch along one lateral edge. A small amount of cortex remains on the flake's dorsal surface, adjacent to the striking platform, while the distal end of the flake has been snapped off. This fracture bisects a retouch flake scar. This item measures 1.6 cm x 1.4 cm x .2 cm and weighs .6 g.

A quartz primary flake also was recovered. During manufacture, this flake was removed from a quartz crystal, with two facets of the crystal forming the dorsal surface of the flake. This flake is between 1 and 2 cm in length. Also recovered from this site is a 3.1-cm long quartz crystal exhibiting battering and small flake scars.

A large quartz tertiary flake was recovered from this site. The distal end of this flake has been snapped off. The extant segment measures between 2 and 3 cm in length. Three small flake fragments are of Ogallala quartzite. Two of these flakes are between 1 and 2 cm and the third is between 2 and 3 cm in length.

A 2-cm long angular fragment of weak red chert was also collected, but is of questionable cultural origin. This item appears to be a small, fractured river pebble.

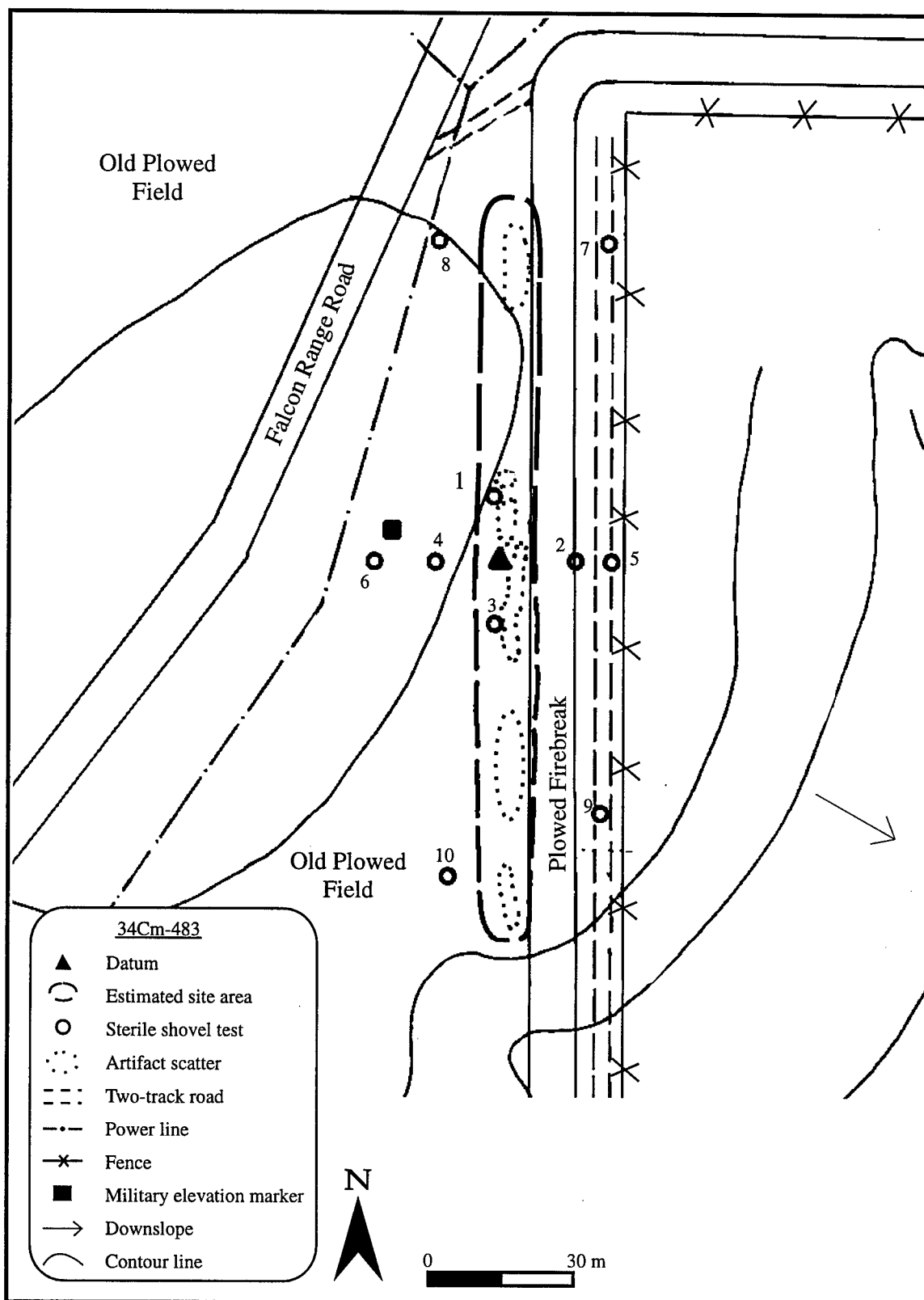


Figure 46. Plan map of site 34Cm-483 (92-118).

Summary

This site has little research potential due to the limited amount of cultural material, lack of subsurface deposits, and the disturbance to the site. No further work is recommended at this site, and it is not recommended for inclusion in the NRHP.

34Cm-276 (92-119): Four Snakes Bluff

Site 92-119 is a very low density lithic scatter at the crest of a 60 ft high bluff that forms the western bank of West Cache Creek. Located at the northern edge of Fort Sill, this site has been previously recorded as 34Cm-276. The site lies within an area where the soil is mapped as granite cobbly land; however, the immediate vicinity of the site is primarily composed of granite outcrop. The elevation of this site is 417 m (1,370 ft) amsl. Vegetation observed in the area of the site consisted of blackjack oak, post oak, juniper, long stem bunch grass, goldenrod, Texas rainbow cactus, and prickly pear cactus.

At the time of the previous investigations, 21 pieces of lithic debris were collected from the surface of this site. No tools or diagnostic artifacts were collected or recorded at that time. During the current survey, two pieces of lithic debris and a graver were collected from the surface of this site. The only other items observed on the surface of this site were two pieces of quartz shatter; however, these were not collected. All artifacts were observed within 5 m of the bluff's edge. No shovel tests were excavated at this site due to the absence of any soils. Site area is presently estimated at 120 m², compared to 180 m² when originally recorded (Figure 47).

Prehistoric Artifacts

The collected artifact assemblage consists of a graver and two flake fragments from this site. The graver is a bifacial preform with a medial fracture (Figure 48). The face of the medial fracture has been trimmed to form a graver spur, with rounding of this spur indicating moderate use wear. This artifact measures 3.6 cm x 3.5 cm x 1.0 cm, weighs 11.8 g, and is made from Edwards (10YR 7/4) chert. One flake fragment is Ogallala quartzite and the other is quartz. Both of these flakes are between 1 and 2 cm in size.

Summary

In addition to the prehistoric material located at this site, an abundance of military C-ration cans, MRE packages, and shell casings was observed in the site area, indicating that the site area has been utilized for training exercises. No further work was recommended for this site when it was originally recorded and this assessment is still valid. This site is not recommended for inclusion in the NRHP.

34Cm-484 (92-120)

Site 34Cm-484 is a very low density lithic scatter observed in the Quanah Range Impact Area's northern firebreak, on a second terrace east of West Cache Creek. The soil in the area is mapped as Port loam, and the site elevation is approximately 390 m (1,280 ft) amsl. Vegetation observed in the area of the site consisted of post oak, juniper, sloe, blackjack oak, long stem bunch grass, mixed grasses, and goldenrod.

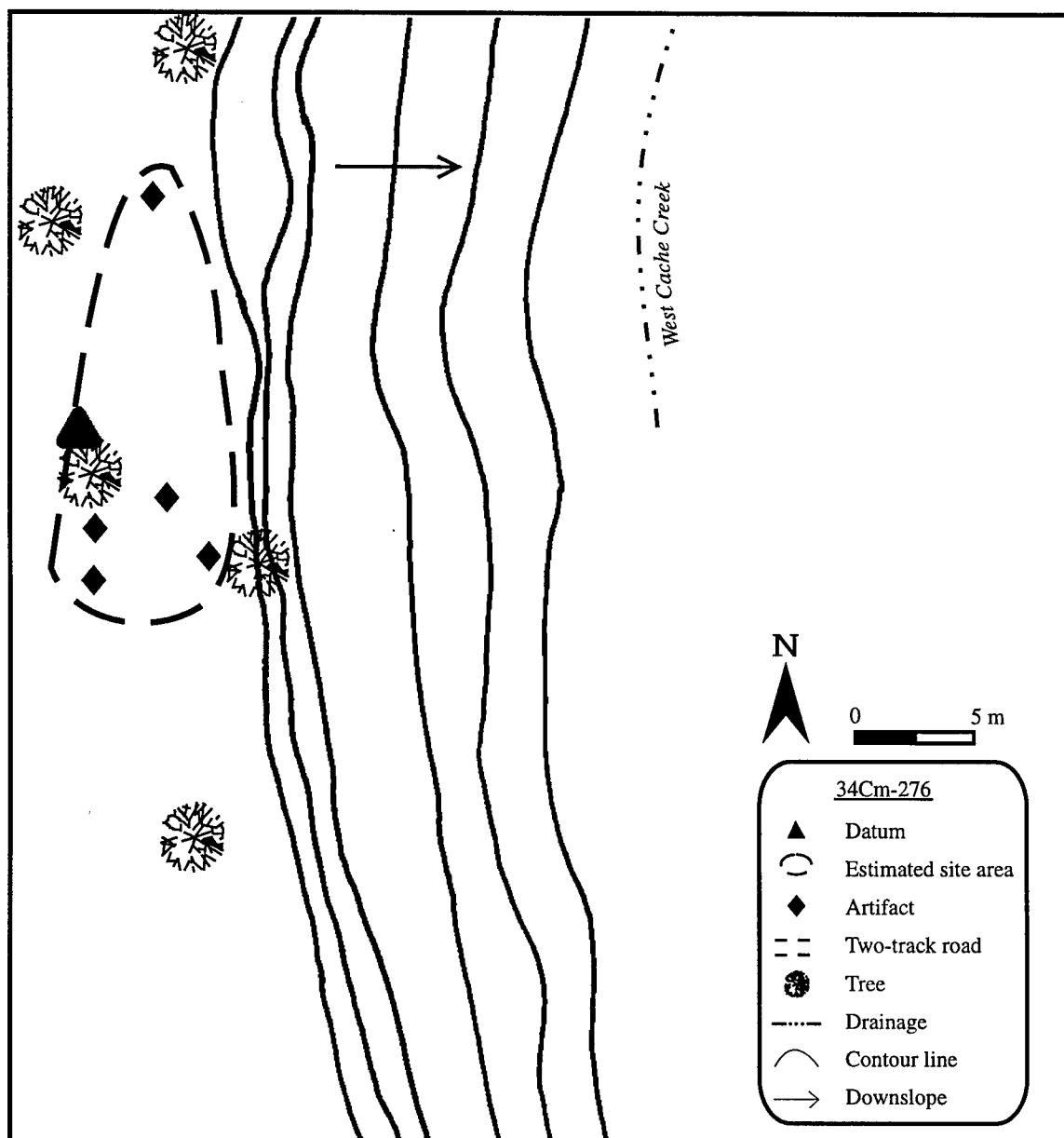


Figure 47. Plan map of site 34Cm-276 (92-119).

The observed lithic artifacts were scattered in a 60-x-20-m area along the firebreak; the only specimen collected from this site was a chert Fresno point. No cultural material was observed outside of the firebreak. Nine shovel tests were excavated at the site with no cultural material observed in any of the tests. The deepest test reached a depth of 38 cm in a silty sand loam. The other tests revealed only 10 cm to 20 cm of loam over granite gravels. Site area is estimated at 800 m² (Figure 49).

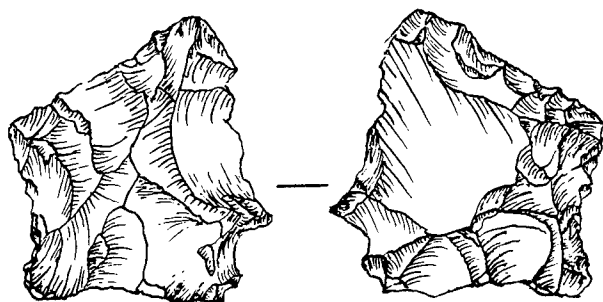


Figure 48. Diagnostic lithic artifact recovered from 34Cm-276 during the 1992 survey: Edwards chert graver. (Scale 1:1)

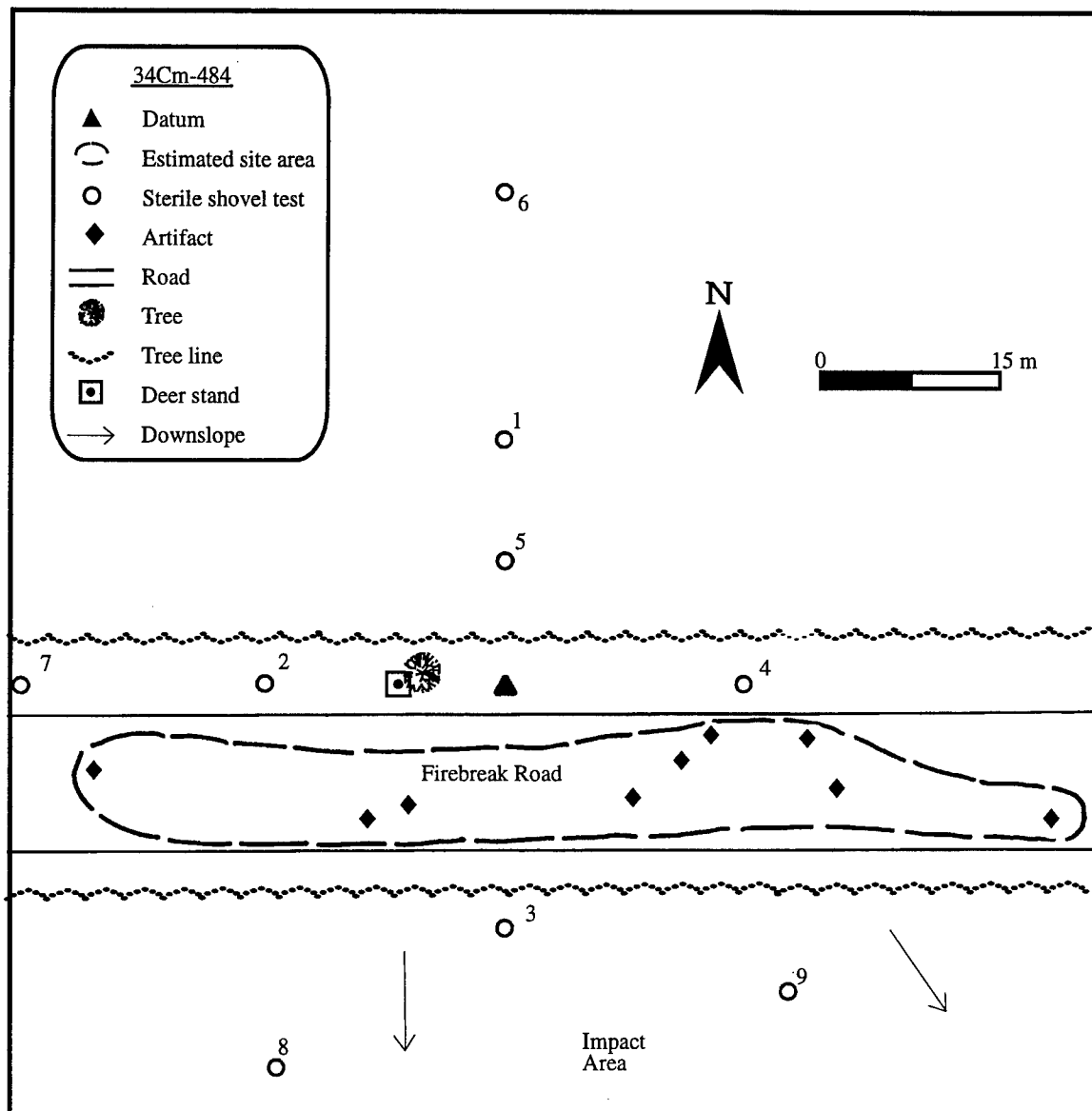


Figure 49. Plan map of site 34Cm-484 (92-120).

Prehistoric Artifacts

The only artifact collected from this site is a Fresno point made of Alibates (10R 6/2) chert (Figure 50). This finely made point is complete except for approximately 3 mm of the tip. This artifact measures 1.9 cm x 1.0 cm x .3 cm and weighs .5 g. Eight tertiary flakes of chert and quartz were observed on the ground surface but were not collected.

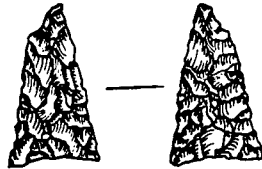


Figure 50. Diagnostic lithic artifact recovered from 34Cm-484 during the 1992 survey: Alibates chert Fresno arrow point. (Scale 1:1)

Summary

There is no need to conduct further work on the portion of this site that is within the boundaries of the Fort Sill Military Reservation. It is, however, possible that material relating to this site may exist west of the boundary fence, on lands controlled by the Wichita Mountains Wildlife Refuge. Therefore, in order to fully assess this site's potential for inclusion in the NRHP, testing should be performed within the wildlife refuge.

34Cm-489 (92-129)

This site is a historic farmstead located on the level plains south of the Wichita Mountains and east of West Cache Creek. Elevation at this site is 393 m (1,290 ft) amsl. Soil in the site area is mapped as Foard-Slickspots complex. The area immediately west of the site is mapped as Port loam, but observations indicate that an undetermined portion of this area is granite cobbly land, possibly due to agricultural-related erosion. Vegetation observed in the area of the site consisted of mesquite, mixed grasses, and wildflowers.

A total of six features exists at this site: (1) a house foundation with a cistern; (2) a storm cellar; (3) an outbuilding foundation; (4) a second house foundation; (5) a set of concrete steps; and (6) a small foundation of undetermined function. The first house foundation measures 15.7 m (N/S) by 8 m (E/W). The foundation includes a crumbling concrete slab porch with two concrete steps at the southern end of the foundation. A cistern is located at the southeastern corner of the foundation.

The second feature is a reinforced concrete storm cellar that is still intact. The interior dimensions are 305 cm (N/S) by 241 cm (E/W) by 214 cm high. The width of the doorway is 83 cm. The third feature is an outbuilding foundation located 20 m north of the storm cellar. The concrete footings measure 4 m x 4 m and have small sections missing.

Feature four is a foundation that may also represent a residence. It measures 9 m x 11 m. The footings of the southern portion are thicker than the northern section. No bolts or cut-off metal are visible in the

foundation. Six meters south of this foundation is a set of preformed concrete stairs with three risers; these stairs are resting at an angle on the ground surface. It is not known with which foundations these steps were originally associated.

The sixth and last feature is a small concrete foundation of uncertain function. These footings measure 1.2 m (E/W) x 1.5 m (N/S) and have three sill bolts in three of the walls. The function of this foundation is unknown, but it does not appear to be a well house.

Besides these intact features there is a rubble pile of concrete slabs between the two house foundations, as well as other concrete foundation fragments spread about the site area. It is not known whether these fragments represent the remains of one or more foundations that have been totally destroyed or if they were once part of the foundations described above. The site encompasses an area of approximately 6,400 m² (Figure 51).

Brown and clear glass bottles, brick fragments, and roofing tiles were observed on the ground surface. Extensive survey effort was exerted in an attempt to locate a dump at this site, but none was found. Of the ten shovel tests excavated, four were positive. Material recovered in shovel tests included whiteware fragments, glass fragments, asphalt roofing fragments, a brick fragment, and a metal coat hook. All of the material was recovered in the upper 20 cm. No shovel tests were dug southwest of Shovel Test 6; this area is granite cobbly land with sparse vegetation and minimal surface sediments.

Historic Artifacts

Historic material was collected from the surface and four shovel tests at this site (Figure 52). Diagnostic material from the surface consisted of one mustard jar made by the Latchford Glass Company (1957-1990), one Owens-Illinois bottle (1954-1990), one Liberty Glass Company bottle (1946-1954), and one amber beer bottle with a stippled base (1940-1990). Shovel test material included an ash tint Pierce Glass Company bottle base (1915-1917), an Owens-Illinois bottle fragment (1929-1954), a Fiestaware ceramic fragment (1930-1960), two window pane fragments, several fragments of asphalt roof tiles, a fragment of machine-made brick (1890-1990), and mortar.

Archival Research

This site is located in Section 14, Township 2 North, Range 14 West. Chah-mit-ky, a Comanche woman, was originally allotted the property (Anonymous n.d.:10; Comanche County *Deed Books* 170:372). In 1919 she leased the land for oil and gas mining purposes to Fred J. Amphlett and Edward S. Malone of Lawton and Oklahoma City. Apparently, Chah-Mit-Ky was illiterate for she signed the lease with her thumb mark (Comanche County *Deed Books* 170:372). The lease was to expire in 10 years if no well was drilled. It is not presently known whether or not a well was drilled in connection with the Amphlett and Malone mining venture. At some point previous to government acquisition, the property was divided between Roxie Pahcaddy Plumlee, who obtained the northern half, and Edith Pe-sau-ny, who became the owner of the southern half, the location of 34Cm-489. Both women were Native Americans, so it is likely that they were the heirs of Chah-Mit-Ky (Comanche County *Deed Books* 445:297-298, 496-497), and both were lessors. The government obtained release agreements from Plumlee's lessee, R. E. Farmer, and Pe-sau-ny's lessee, C. E. Price of Lawton, during the acquisition process (Comanche County *Deed Books* 445:287-288, 498-499). Edith Pe-sau-ny along with Jennie Pe-sau-ny and her husband Owen Yackeyonny

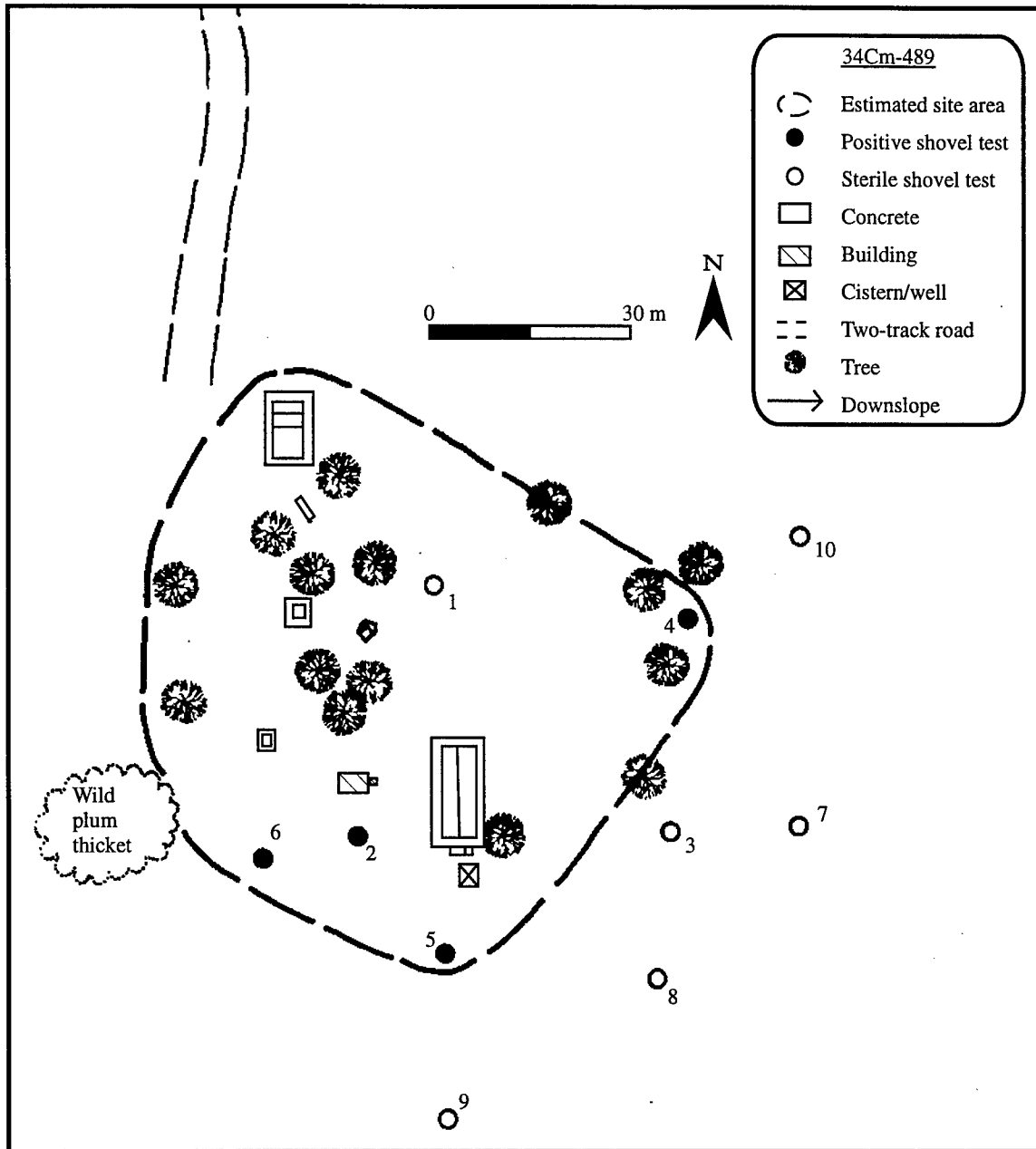


Figure 51. Plan map of site 34Cm-489 (92-129).

sold their property to the U.S. government for \$11,210 in 1956 (Comanche County *Deed Books* 445:496-497). Fort Sill real property records list the improvements to the Pe-sau-ny property at the time of government acquisition as one 32-ft and one 28-ft well (Fort Sill Real Property Office 1959:n.pg.). There was an electric line in the vicinity of the site (Comanche County *Deed Books* 470:736-737).



Figure 52. Selected historic artifacts from 34Cm-489: (a) mustard jar made by the Latchford Glass Company; (b) Nu-Grape Soda bottle. (Scale 1:1)

Summary

This site represents the well-preserved remains of an early twentieth century farmstead. Although this site is located on a Native American allotment owned by the Comanche until government acquisition of the land in 1956, it is unlikely that the allottee or her heirs lived on the land. Further investigation into the inheritance and lease records of the BIA office in Anadarko probably would help confirm or disprove whether or not Native Americans did live on the land between 1900 and 1956. This additional archival research plus testing is necessary in order to fully assess the potential of this site for inclusion in the NRHP.

34Cm-490 (92-130)

This site is a very low density lithic scatter that was observed in the firebreak located at the base of Quanah Mountain. The site is located 70 m east of site 34Cm-479 (92-114) across a small drainage. Soil type is mapped as granite cobbly land, and site elevation is 411 m (1,350 ft) amsl. Vegetation observed in the area of the site consisted of post oak, blackjack oak, sumac, persimmon, juniper, mixed grasses, and greenbrier.

This site consists of a surface scatter of quartz and chert lithic debris observed within the firebreak. Neither tools nor diagnostic items were observed. Eight shovel tests were excavated south of the firebreak, with one test unit yielding an angular fragment of quartz that is of doubtful cultural origin. No shovel tests were placed in the granite cobbly land on the north side of the firebreak. Site area is estimated at 2,375 m² (Figure 53).

Prehistoric Artifacts

Artifacts observed on the surface of this site but not collected included a total of three chert flakes, three quartz flakes, one quartzite flake, and two quartz angular fragments. A single quartz flake fragment was recovered in Shovel Test 2, Level 1, and was the only item collected from this site. This fragment is less than 1 cm in length and weighs .1 g.

Summary

This site and other similar sites aid in our understanding of the prehistoric utilization of the Wichita Mountains region; however, inventory of this type of site is sufficient for research purposes. There is little evidence that any of these upland slope-base sites contain significant subsurface deposits, and it is doubtful that they were ever more than surface scatters. No further work is recommended for this site, and it is not recommended for inclusion in the NRHP.

34Cm-492 (92-132): Baldwin Parker Farm

Site 34Cm-492 is a historic farmstead with three intact features and a widespread, high density scatter of historic artifacts. Informant interviews and archival evidence has identified this location as the home of Baldwin Parker, a son of Quanah Parker. The site is located on the level plain south of the Wichita

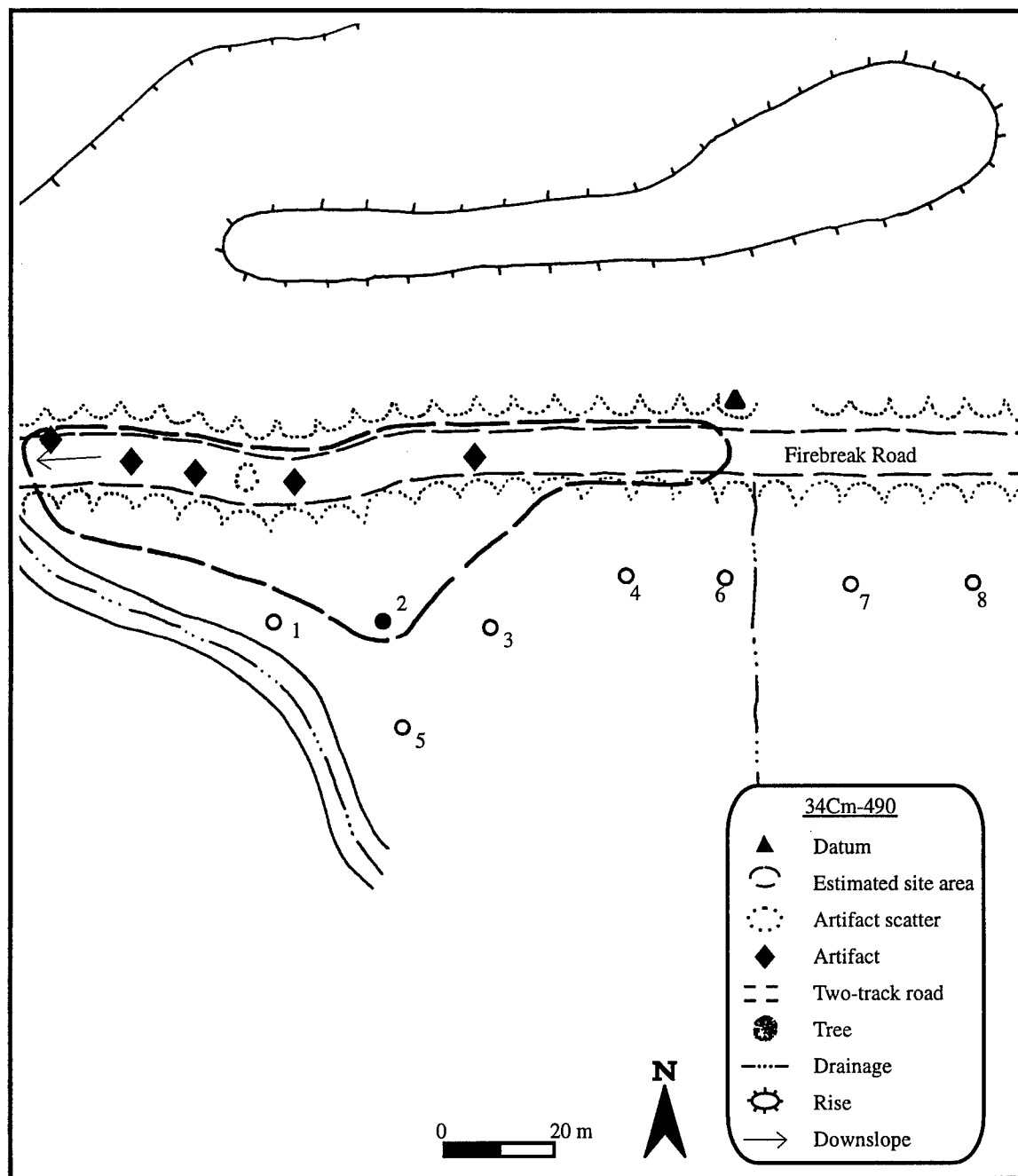


Figure 53. Plan map of site 34Cm-490 (92-130).

Mountains, 100 m east of a small upland tributary of West Cache Creek. Soil in this area is mapped as Foard-Slickspots complex, although a small area of Port-Slickspots complex is mapped along the small drainage to the west of the site. Site elevation is 391 m (1,285 ft) amsl. Vegetation observed in the area of the site consisted of post oak, wild plum, Johnson grass, pokeweed, ragweed, long stem bunch grass, goldenrod, sunflower, aster, and prickly pear cactus.

The first feature observed at the site consists of a T-shaped, 15-x-10-m concrete-and-granite cobble house foundation. The foundation is fashioned of concrete footings with machine-made bricks at all the corners. Two separate L-shaped concrete slabs are located on the southern side of the T's crossbar, one on the east side and the other on the west of the foundation. These appear to be porch foundations.

The second feature is situated at the southwest corner of the house foundation. It is a 2 m deep cistern approximately 4 m to 5 m in diameter. It was most likely lined with brick and mortar, but all such construction materials have been removed. Feature three is a pile of granite cobbles, 148 cm long by 78 cm wide. A small concrete footing is present at the head of this cobble pile. This footing appears to have been sheared off, possibly by a bulldozer.

In addition to the three features observed at the Parker home, there is also an extensive surface scatter of glass, ceramics, metal fragments, brick, and general historic artifacts in four major concentrations that are located 30 m west of house, 10 m north of house, 35 m south of house, and 40 m east of house.

Eleven shovel tests were excavated at this site, with six tests yielding historic artifacts. A sample of 66 items was recovered in shovel tests, making this one of the most productive sites recorded by the survey. The artifacts were mostly glass fragments, but wire nails and metal fragments were also recovered. Site area is estimated at 7,000 m² (Figure 54).

Historic Artifacts

Historic material was collected from the surface and from six shovel tests. Diagnostic glass material from the shovel tests consisted of an Owens-Illinois bottle base (1929-1954), a fragment of opaque Boyd's liner (1900-1950), manganese solarized (amethyst) glass fragments (1880-1920; Figure 55a), aqua bottle fragments (1860-1990), and ash tint bottle fragments (1915-1990). Other shovel test artifacts included wire nails (1880-1990) and four window pane fragments. Diagnostic surface material included one Duraglas bottle fragment (1940-1990), one Ball bottle fragment (1910-1990), an ash tint glass fragment (1940-1990), and soda bottle fragments with enamel labels (ca. 1929). Machine-made glass included a mug, a jar, and bottles (1910-1990). Diagnostic ceramic fragments from the surface consisted of white-white ware decalcomania (1895-1950), bluish tint white ware (1880-1930), and undecorated white-white ware (1890-1990). There were also two 1930s aluminum Oklahoma tax tokens from an elderly assistance program collected from the site's surface (Figure 55b).

Archival Research

Site 34Cm-492 is located in Section 11 and was originally allotted to Cho-ny (Going With The Wind), a Comanche woman and the third wife of Quanah Parker (Anonymous n.d.:19; Hagan 1993:24, 139). Cho-ny divorced Parker sometime during the first decade of the twentieth century (Hagan 1993:139) and remarried before her death, which occurred in or prior to 1919. In that year, Baldwin Parker (also known as Tah-too-ah-rup and Tah-too-ah-rap), Hannie (also spelled Honnie), and C. V. Stinchecum, Superintendent of the Kiowa Agency in Anadarko, let a gas and oil mining lease on the land. They were acting on behalf of Cho-ny's heir, Mary Pow-we-tipe, a minor born in 1910. The lessees were Fred J. Amphlett and Edward S. Malone of Lawton and Oklahoma City (Comanche County *Deed Books* 170:370).

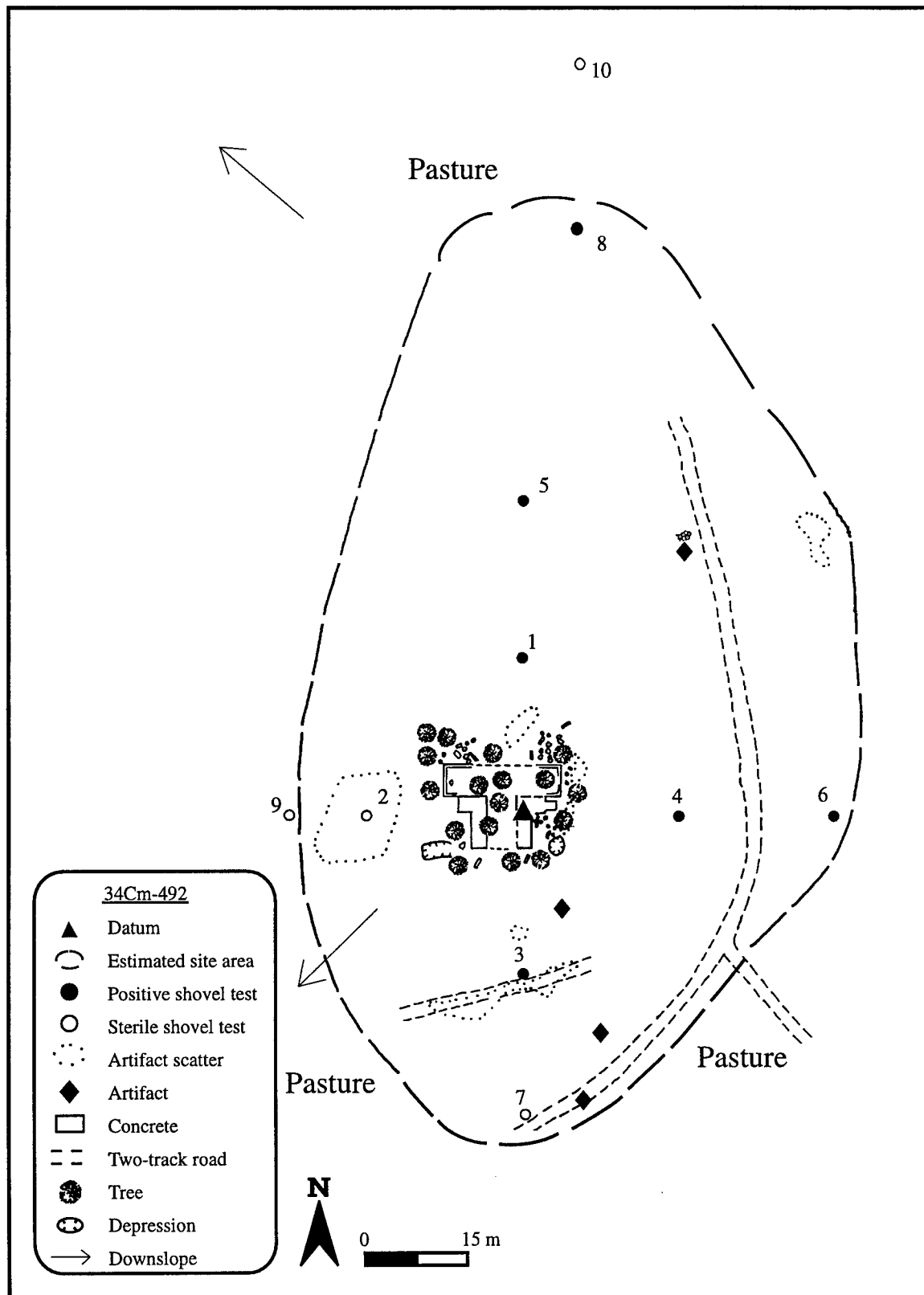


Figure 54. Plan map of site 34Cm-492 (92-132): Baldwin Parker Farm.

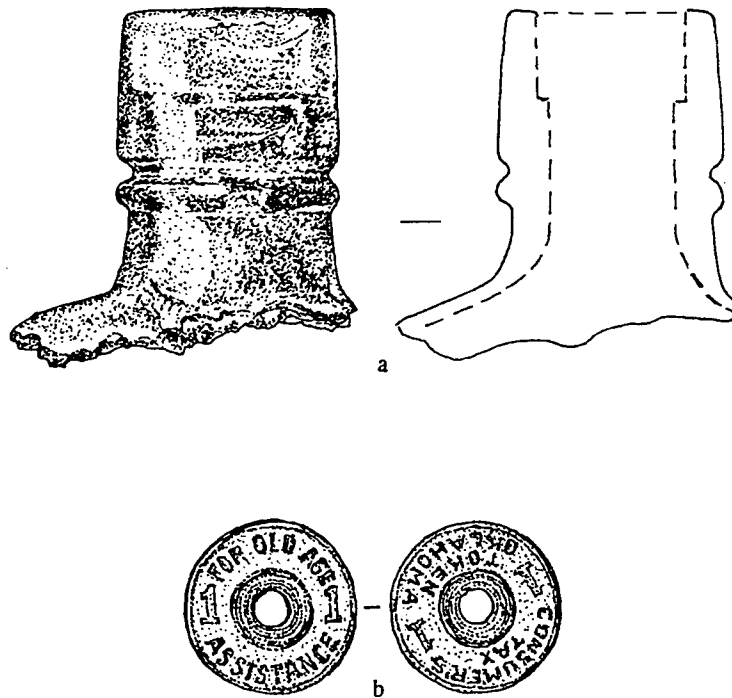


Figure 55. Selected historic artifacts from 34Cm-492: (a) manganese solarized non-applied turn molded bottle lip; (b) 1930s-era Oklahoma tax token. (Scale 1:1)

Baldwin Parker, a son of Quanah Parker, was referred to as "Baldwin Parker (Tah-too-ah-rap) also known as Baldwin Cho-ny" in one legal document (Comanche County *Deed Books* 445:492-493). Historian William Hagan identifies Baldwin Parker as the brother of one of Cho-ny's sons, Harold Parker. He also explains that Hannie was Harold's sister (Hagan 1993:108). This evidence makes it probable that Baldwin and Hannie were Cho-ny's children. However, Quanah Parker had at least seven and possibly eight wives, so it is possible that Hannie and Baldwin were the children of a wife or wives other than Cho-ny.

At some date prior to or during 1956, Baldwin Parker became the owner of the land. He and his wife Nora (Tabbonoid) Parker sold the land to the U.S.A. for \$9,000 in 1956 (Comanche County *Deed Books* 445:492-493). Fort Sill real property records list only one improvement on the property as of the date of acquisition: a well approximately 3½ ft in diameter and 15 ft deep (Fort Sill Real Property Office 1959:n.pg.). In 1956, the U.S.A. obtained a release of lease agreement from Dave and Clinton Reeves for 24 acres of land that was located on the acreage sold by Parker and his wife to the U.S.A., and may have included the land on which site 34Cm-492 is located. The release does not specify the exact location of the leased 24 acres within the parcel of land owned by the Parkers (Comanche County *Deed Books* 446:94-96).

Joyce Connahvichnah and her husband Inman Cloyde Gooday owned the mineral rights to the land that the Parkers sold the U.S.A. in 1956. Connahvichnah and Gooday sold the mineral rights in 1956 for \$60 (Comanche County *Deed Books* 445:494-495).

Summary

This site is one of the best-preserved historic farmsteads located on the Fort Sill Military Reservation. Historic evidence indicates that one of at least seven people or groups could have built the farmstead that was located at this site. The first six include: Ch-ony; Baldwin Parker and his wife, Nora; Mary Pow-wi-tippe; other Comanches with an interest in the parcel who are not mentioned in the Comanche County Deed Books; lessees (the Reeves or others); or possibly even squatters. The seventh possibility is that the site is the former location of a house that the government constructed for three of Parker's children. William Hagan writes that during his tenure as Indian Agent (1899-1905), William Randlett "arranged for the construction of a five-room house to be occupied jointly by Harold and his brother and sister, Baldwin and Honnie" (Hagan 1993:108). However, Hagan does not explain where the house was located. The records consulted by Hagan that describe the house that the government constructed for Baldwin and his siblings also might be of assistance in locating the site of the former building. Finally, interviews with Parker family members, such as Baldwin Parker's son, Baldwin Parker, Jr., would be useful in obtaining information on this site and others in the area.

Additional archival research and further testing is recommended for this site in order to evaluate fully its potential for inclusion in the NRHP. However, it is recommended that preservation efforts not be delayed for this potentially significant property.

34Cm-493 (92-133): Blacksmith Sexon Farm

This site consists of a historic farmstead and what is believed to be a blacksmith shop. Local informants have indicated that this property and the blacksmith shop were owned and operated by Marshall Sexon, reported to be a distant relation of Quanah Parker. The site rests on a flat terrace just east of Quanah Creek. The southern half of the site is in an actively plowed field, while the north half is in a wooded area next to Quanah Creek. Soil in this area is mapped as Port loam; elevation is 392 m (1,286 ft) amsl. Vegetation observed in the area of the site consisted of pecan, oak, hackberry, elm, sumac, wild plum, pokeweed, ragweed, Johnson grass, long stem bunch grass, wild sunflowers, goldenrod, and poison ivy. Some of the trees that surround the house area are very large, very old oaks and pecans and may have been planted there by the homesteaders.

Six features are definable at this site. The first is a thick pier-and-beam concrete foundation that was probably the blacksmith shop. Historic artifacts found in association with this foundation included horseshoes, metal plow parts, metal hooks, and large strips of metal. Located 26 m northeast of this foundation is the second feature, a well (80 cm in diameter) with a brick and mortar neck. The bottom of the well, which is 1.5 m deep, has been plugged with poured concrete.

Located 120 m north of the blacksmith shop is a large clearing in the trees. In this clearing is Feature 3, a concrete rubble scatter that is believed to represent the remains of a pier-and-beam house foundation. No estimate of the dimensions of this structure was possible. The fourth feature is a concrete-and-granite cobble storm shelter with dimensions of 4 m². One intact wall and a square depression containing concrete and granite rubble are all that remain of the shelter.

The fifth feature is the fragmented remains of a concrete sidewalk that runs east to west on the east side of the house foundation remnant. The sixth feature is a rock alignment of large granite cobbles piled in an long oval shape, approximately 2.7 m x .98 m. No other cobbles are found around the site.

Seventeen shovel tests were excavated at the site, with eight tests yielding historic materials. The test units indicated that artifacts are present to a depth of 30 cm. All tests showed a fairly deep, compact deposit of sandy silt soil. Artifacts recovered in the shovel tests included glass fragments, whiteware, brick fragments, wire nails, and bone fragments. Site area is estimated as 12,000 m² (Figure 56).

Historic Artifacts

A large quantity of historic artifacts was collected from the surface and from eight shovel tests. Diagnostic ceramics recovered from the shovel tests consisted of white-whiteware fragments and exterior/interior bristol stoneware fragments. Diagnostic glass material recovered from the shovel tests included green soda bottle fragments (1930-1990), manganese solarized bottle fragments (1880-1920), an ash tint panel bottle fragment (1915-1990), and ash tint bottle fragments (1915-1990). Wire nails (1880-1990) and four window pane fragments were also recovered from the shovel tests. Diagnostic ceramics collected from the surface consisted of gilded decalcomania decorated white-whiteware (1895-1950), handpainted white-whiteware (1890-1990), bluish tint ironstone (1850-1910), and white-whiteware (1890-1990). Stoneware fragments from the surface included exterior/interior bristol (1900-1990), exterior/interior albany (1875-1900), and exterior bristol/interior albany (1890-1915). Surface glass material included one Owens-Illinois glass bottle base (1954-1990), an aqua jar base (1860-1990), and ash tint bottle fragments (1915-1990). Manganese solarized (amethyst) glass included a tumbler, tableware, and bottle fragments (1880-1920). Architectural artifacts recovered from the surface included one window pane fragment, wire nails (1880-1990), and a small amount of mortar. A large quantity of metal material, i.e., a saw blade, a horseshoe, a length of chain, brackets, and a hinge, was recovered from the surface. A MBD of 1906 is estimated for the site, based on the recovered diagnostic contextual material.

Archival Research

Harold Parker (Pah-ko), son of Quanah Parker and Cho-ny, was allotted the land containing this site (Anonymous n.d.:54; Comanche County *Deed Books* 58:159-160; Hagan 1993:107). Harold Parker attended Carlisle Indian School, but returned to the vicinity of Fort Sill around 1901. After his return, Pah-ko handled his father's correspondence until he (Pah-ko) developed tuberculosis (Hagan 1993:107). Historian William Hagan explains that William Randlett, Indian Agent from 1899 to 1905, exerted his influence to have a five-room house built for Harold Parker, his brother Baldwin, and sister Honnie. There is no report of where this house was located (Hagan 1976:219, 1993:108), although evidence acquired during this survey indicates that it may exist at site 34Cm-492. Pah-ko died before 1906, probably of tuberculosis. In 1906, Quanah Parker, Harold Parker's heir, sold the property to William E. and May E. Beaver of Cache (Comanche County *Deed Books* 12:601). Parker sold the land because he needed the \$3,025 to pay back debts and in his own words wanted "to make some improvements on my homestead and buy some cattle, and the balance I wish to place at interest" (Hagan 1993:109). Parker was unable to obtain the money, however, as it was held in trust by the government. The ethnicity of the Beavers is presently unknown. Two people named Beaver, both Wichita, appear on the list of Kiowa, Comanche, Apache, and Wichita allottees (Anonymous n.d.:61, 70), but neither May nor William Beaver's name is on the list. May E. and William Beaver took out three mortgages between 1907 and 1908, all of which were released (Comanche County *Deed Books* 12:517, 38:354, 95:65, 187, 134:611, 623). By 1918 May E. Beaver had married J. Whit Hadley, and together they took out a mortgage on the property in 1918. The mortgage was released in 1919 (Comanche County *Deed Books* 145:589, 171:8). Apparently, by 1919, May and J. Whit Hadley either divorced or Hadley died, for in that year May E. and Nona Beaver,

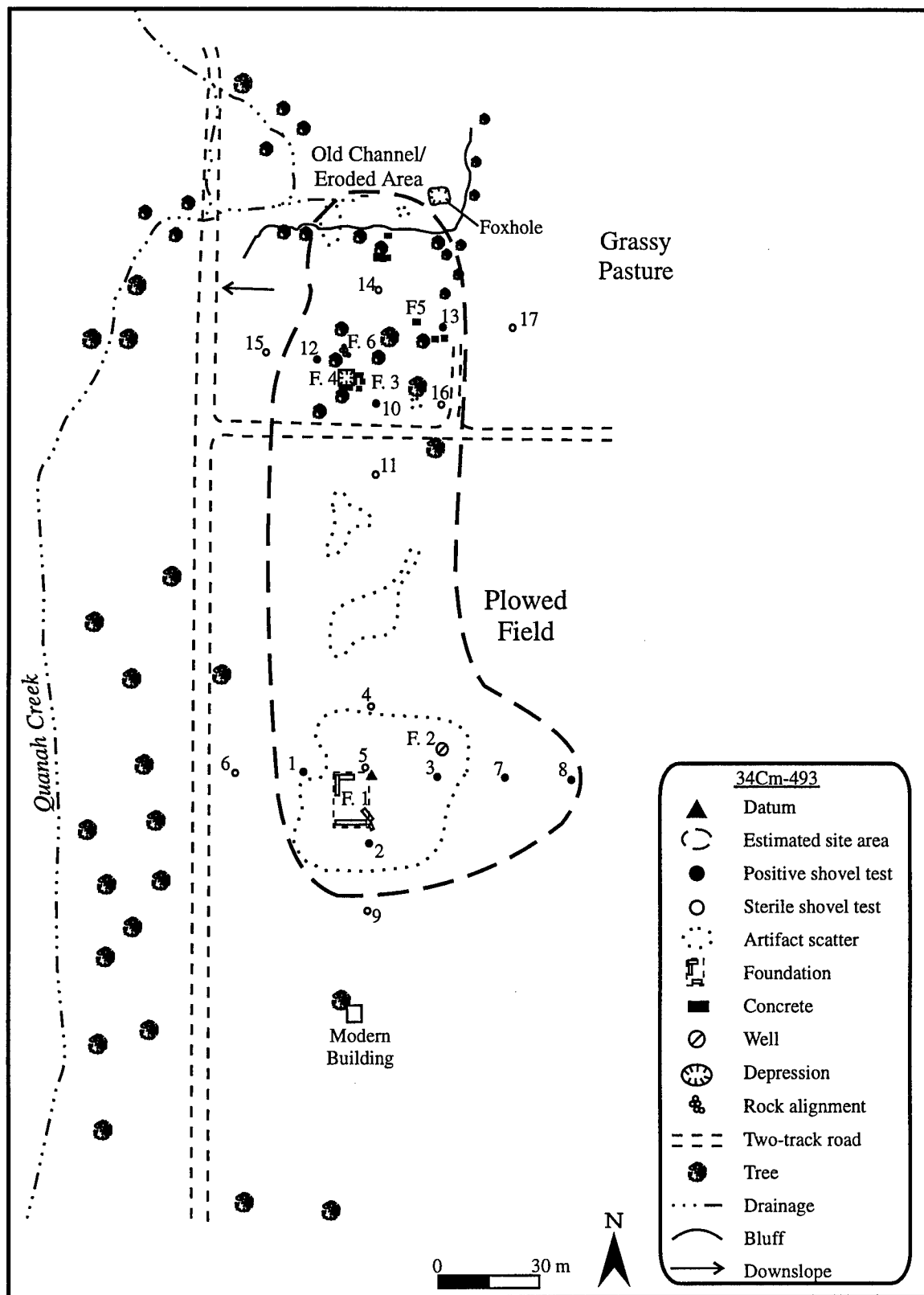


Figure 56. Plan map of site 34Cm-493 (92-133): Blacksmith Sexon Farm.

"both single," took out a mortgage on the property (Comanche County *Deed Books* 164:38). It was released in 1952 (Comanche County *Deed Books* 359:689). In 1919 May E. and Nona Beaver of Cache leased the mineral rights to F. G. Amphlett for oil and gas mining purposes (Comanche County *Deed Books* 163:470).

At some time between 1919 and 1951, May E. Beaver married S. J. Lee, and Nona Beaver married T. Norris. In 1951, May E. and S. J. Lee, and Nona and T. Norris deeded a portion of their land holdings to Marshall L. and Mary R. Sexon "as joint tenants and not as tenants in common with full rights of survivorship, the whole estate to vest in the survivor in the event of the death of either" (Comanche County *Deed Books* 369:591). The 1951 deed lists the address of the Norris family as Kay County, Oklahoma; however, Nona and T. Norris visited a notary in Santa Clara, California, in connection with the deed, so it is possible that they lived in California (Comanche County *Deed Books* 369:591). The Sexons later took out two mortgages on the land (Comanche County *Deed Books* 366:501, 401:597).

Wayne Misener quit claim deeded his rights to Marshall L. Sexon in 1956 for \$1.00. The deed does not specify what Misener's rights were. Possibilities include mining, grazing, or farming rights (Comanche County *Deed Books* 438:654). The Sexons sold the property to the U.S.A. in 1956 for \$22,000 (Comanche County *Deed Books* 439:652). Fort Sill real property records list no improvements on the property as of government acquisition in 1956 (Fort Sill Real Property Office 1959:n.pg.). Electric lines ran along the eastern side of Section 10, and there was an electric line in the eastern half of the section (Comanche County *Deed Books* 446:557-558, 470:736-737).

Summary

While this site has suffered moderate disturbance, it is one of the best-preserved commercial properties located on the Fort Sill Military Reservation. May E. Beaver (later May E. Hadley, then May E. Lee) and her family owned the property for 45 years and it seems likely that they were associated with the farmstead located here. The wording of the 1956 deed to Marshall Sexon suggests that May E. Lee and her husband lived on the property at that date, and that Sexon agreed to let them remain there for the remainder of their lives. At the present time, the ethnicity of William E. Beaver and May E. Beaver/Hadley/Lee is unknown; however, census record research would probably result in a determination of ethnicity.

Because of the length of time that one family is likely to have occupied this site, it is worthy of further consideration, especially if the family was Native American. Although Marshall Sexon, whom oral tradition reports to be a distant relative of Quanah Parker, only owned the land on which the site is located for five years in the 1950s, his connection to the property is not particularly significant unless he rented or occupied the property before purchasing it.

Additional archival research and further testing is recommended for this site in order to evaluate fully its potential for inclusion in the NRHP.

34Cm-494 (92-134)

Site 34Cm-494 is a historic farmstead located on the slope east of Rock Creek, south of the Wichita Mountains. Soil in this area is mapped as Foard-Slickspots complex. The elevation is recorded as 396

m (1,300 ft) amsl. Vegetation observed in the area of the site consisted of hackberry, mesquite, wild plum, sumac, Johnson grass, long stem bunch grass, mixed grasses, ragweed, milkweed, sunflower, goldenrod, and prickly pear cactus.

The site exhibits five distinct features. The first feature is the remnants of a steel-reinforced concrete block-and-slab house foundation, estimated to have measured 12 m x 10 m. Only the southeast corner of this foundation remains intact. One meter north of the estimated north wall of the house is a collapsed storm shelter, Feature 2. The remains of this structure measure 5 m x 3 m. Forty meters east and 10 m south of the house is the nearly intact remains of Feature 3, a 12-x-13-m pier-and-beam barn. Forty-two meters north of the barn is a 3.5-x-7-m concrete slab outbuilding foundation (Feature 4). In the middle of all of these features is a well with a 2-x-2-m concrete slab cap (Feature 5). Both the barn foundation and outbuilding foundation had steel sill bolts embedded in the concrete.

A low density scatter of historic artifacts was visible on the surface, but the dense cover of mixed grasses reduced ground visibility to only five percent. Six shovel tests were excavated, with two yielding historic artifacts. All historic artifacts were recovered between 0 cm and 10 cm bs; indeed, only one shovel test unit exhibited a soil horizon deeper than 20 cm. Artifacts noted on the surface included wire nails, a piece of a mower blade, vessel glass, and blue ceramic fragments in and around the storm shelter. The two positive shovel tests contained glass fragments and wire nails. The site area is estimated at 5,600 m² (Figure 57).

Historic Artifacts

A total of 13 artifacts was collected from the surface and two shovel tests. The material recovered from the shovel tests consisted of clear glass fragments, ash tint glass fragments (1915-1990), and wire nails (1880-1990). Surface material collected consisted of one Fiestaware fragment (1930-1960), cobalt blue glass fragments, green milk glass fragments (1920-1950), wire nails (1880-1990), and a possible mowing equipment blade.

Summary

This site exhibits several moderately well to poorly preserved features, a low density scatter of artifacts, and a small amount of subsurface material. While the quantity of artifacts is low, it is balanced by the number of features present, which is in the upper range for historic sites at Fort Sill. It is recommended that further archival research plus testing be conducted to evaluate fully this site's potential for inclusion in the NRHP.

34Cm-495 (92-135): To-pay Parker Farm

This site is the home of To-pay Parker, a wife of Quanah Parker. A ranch, a farm, and a Comanche school were once situated here on the level plain south of the Wichita Mountains. Quanah Creek crosses the western edge of this site, entrenched within a 15-m deep cut. Quanah Parker's house is approximately 1 km upstream from this site. The soil in this area is mapped as Port-Slickspots complex; site elevation is 390 m (1,280 ft) amsl. Vegetation observed in the area of the site consisted of post oak, juniper, pecan, hackberry, elm, sloe, sumac, ragweed, Johnson grass, long stem bunch grass, mixed grasses, sunflower, asters, goldenrod, poison ivy, and prickly pear cactus.

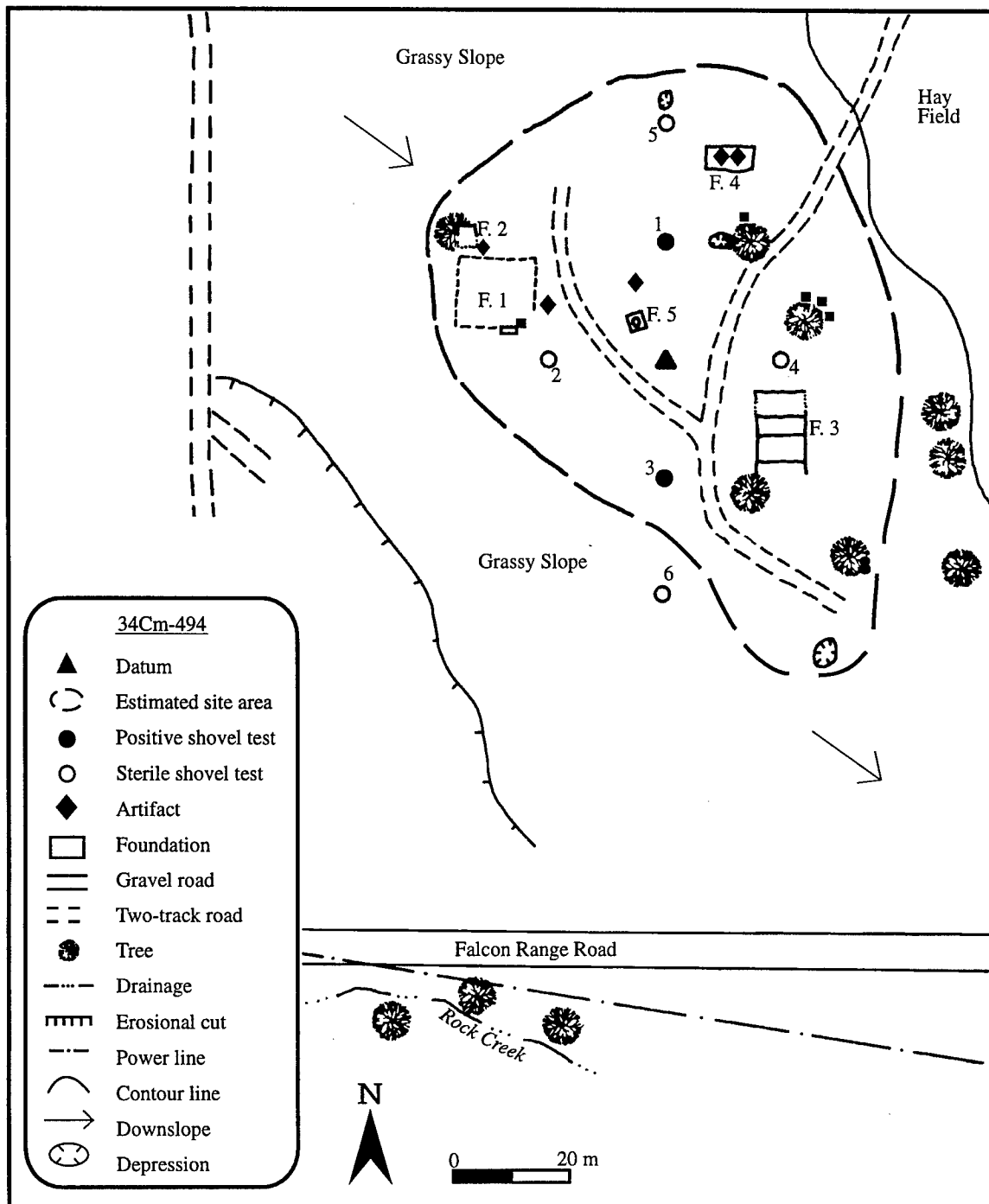


Figure 57. Plan map of 34Cm-494 (92-134).

The first of five distinct but disturbed features at this site is the house foundation. The front porch is a 2.5-x-9-m concrete slab with four steel bolts for a half wall or wooden rail. The bolts are on the southeast and west edges. The date "July 1907" is scratched into the concrete on the south edge of the porch.

Extending for 10 m north from the porch slab is a pier-and-beam foundation, very little of which remains in situ. Concrete steps at the northern end of the foundation remnant are presumed to be from the back entrance. These steps have a steel horseshoe embedded into the concrete steps as a foot scraper. Several flower beds are located along the edge of the cutbank west of the house foundation.

The second feature is a collapsed root shelter depression west of the house. The depression measures 4 m x 4 m, and has a small walkway that leads to the house porch. The shelter was constructed of wood beams, metal sheeting (including an old beer sign), and wooden boards covered by earth. While this may have been a storm shelter, it is the only one observed thus far made primarily of wood.

The third feature is a concrete slab poured over granite cobbles with no steel bolts or bar to reinforce it. It is 4 m x 4 m and may be an outbuilding foundation. It is fractured but still in situ. The fourth feature is a 2.75-m² concrete slab. It has a raised lip of concrete around the edge and a west-facing doorway; it probably represents the remains of a shed or pump house. The fifth feature is a five-sided poured concrete seep well. It measures 90 cm wide and is located in the stream cut, 1 m from the edge of Quanah Creek.

A high density surface scatter of historic artifacts was observed at site 34Cm-495. Ten shovel tests were excavated, with five yielding historic artifacts. Porcelain, aluminum tax tokens, nails, and ceramics were recovered in shovel tests from depths of 0 cm to 15 cm. Total site area is estimated at 3,800 m² (Figure 58).

Historic Artifacts

A total of 25 artifacts was recovered from the surface and five shovel tests. Diagnostic material recovered from the shovel tests consisted of a Knox Glass Company bottle base (1932-1953), clear Depression glass (1920-1950), manganese solarized fragments (1880-1990), a white-whiteware fragment (1890-1990), and a wire nail (1880-1990). Diagnostic glass material from the surface included a fragment of pink Depression glass (1920-1950), an ash tint serving dish base (1915-1990), and manganese solarized glass fragments (1880-1920).

Archival Research

As a Comanche woman and wife of Quanah Parker, To-pay was allotted a quarter of Section 10 (Anonymous n.d.:n.pg.). To-pay was one of two wives, along with To-nar-cy, who remained with Quanah Parker until his death in 1911 (Hagan 1993:115). In 1919, To-pay, who was illiterate, leased the land for oil and gas mining purposes to Fred J. Amphlett and Edward S. Malone of Lawton and Oklahoma City (Comanche County *Deed Books* 170:367).

To-pay Parker sold her quarter of Section 10 to the U.S.A. in 1956 for \$26,000 (Comanche County *Deed Books* 446:59-60). Two individuals, Frank Rush, Jr., and Carl D. Jackson, signed release of lease agreements with the government in 1956 and 1957 for this quarter of Section 10 (Comanche County *Deed Books* 446:53-55, 56-58). Jackson, whose lease had been approved in January 1953 and was to have expired in December 1958, was paid a total of \$626 by the government in 1956. Jackson's address is listed as Route 1, Cache, Oklahoma, on the release of lease agreement. The agreement does not specify what kind of a lease was being released, but possibilities include farming, grazing, and mineral rights (Comanche County *Deed Books* 446:56-58). Rush was paid \$1,251 in 1957 by the government when he released his

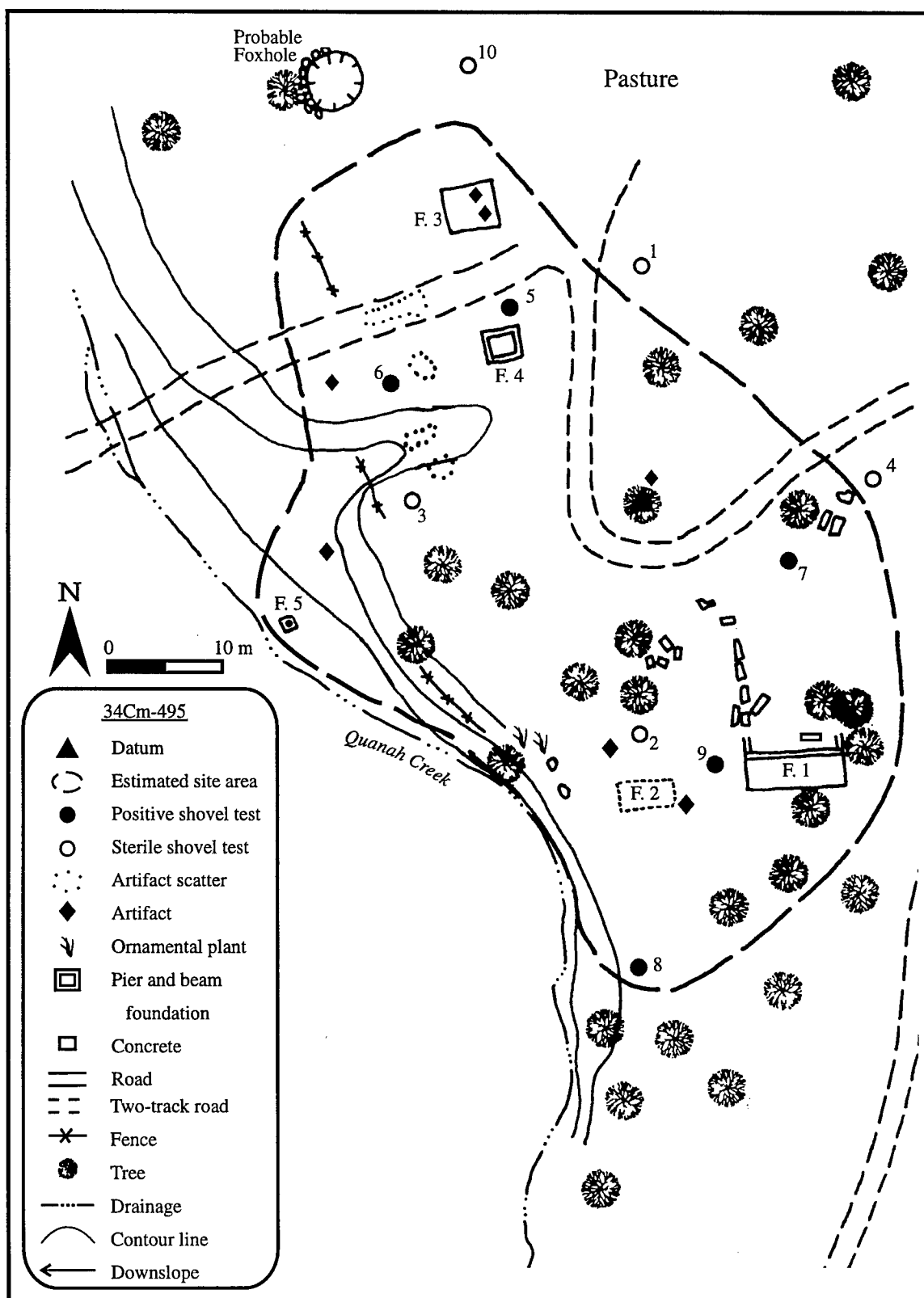


Figure 58. Plan map of site 34Cm-495 (92-135): To-pay Parker Farm.

lease. The lease was to have expired in December 1958. The release agreement does not specify what rights were released. At the time of government acquisition of the property, a telephone line ran along the east side of Section 10 (Comanche County *Deed Books* 446:557-558) and there was an electric line in the eastern half of the section (Comanche County *Deed Books* 470:736-737). Fort Sill real property records list no improvements on the property at the time of government acquisition (Fort Sill Real Property Office 1959:n.pg.).

It is likely that To-pay Parker lived in Star House with her husband until his death in 1911. Further, it was she, and not To-nar-cy, who following Parker's death "got occupancy of the [Star] house and the proceeds from the lease of the thirty-five cultivated acres--as long as she remained single" (Hagan 1993:122).

The length of time To-pay leased the land allotted to her and the purposes for which it was leased, as well as the date, will determine the likelihood that lessees, rather than To-pay Parker, were responsible for building the site or a portion of the site.

Informants report that a Comanche school was located on To-pay Parker's land. Evidence in deed title records neither confirms nor refutes the possibility of a school in this location. The fact that To-pay made a thumb print on a 1919 lease (Comanche County *Deed Books* 170:367), while other individuals signed similar leases, makes it probable that she was illiterate. Therefore, unless the school taught subjects different from those in Euro-American schools (i.e., reading, writing, and mathematics), it is unlikely that To-pay Parker taught at such a school or ran it, although it remains possible that she provided land and/or finances for a Comanche school.

It is possible that the informant who reported a Comanche school on To-pay Parker's land was referring to the school founded by Quanah Parker on his own allotment (therefore founded sometime between allotment in 1900 and Parker's death in 1911). Historian William Hagan explains that Parker negotiated with the Comanche County Superintendent of Schools to open a new district that would include the part of Comanche County where the Parkers resided. Previous to Parker's request, this area was not part of a school district. Parker took this action after the prejudice of Euro-Americans forced one of his sons, Kelsey, out of the school he attended in Cache. Parker then sent Kelsey to Fort Sill Indian school, but Hagan (1993:110-111) quotes Parker as stating: "No like Indian school for my people. Indian boy go to Indian school, stay like Indian; go to white school, he like white man. Me want white school so my children get educated like whites, be like whites."

Summary

Along with Quanah Parker's Star House site, Baldwin Parker's farm, and Marshall Sexon's Blacksmith Shop, this is one of the sites that can aid in understanding the late nineteenth and early twentieth century settlement of this area by Native Americans. Further archival research and archeological testing is needed to evaluate fully this site's potential for inclusion in the NRHP.

34Cm-496 (92-136)

This site is located in the dissected uplands found at the southern edge of the Wichita Mountains. The site contains a collapsed structure, a fractured concrete slab, fractured concrete pillars, an old driveway, and

a moderately dense scatter of historic artifacts. Soil in the area is mapped as granite cobbly land, while the elevation of the site is recorded as 420 m (1,380 ft) amsl. Vegetation observed in the area of the site consisted of post oak, blackjack oak, mixed grasses, and wildflowers.

The first feature is a 5-x-3-m semi-subterranean concrete-and-granite cobble structure, believed to be the collapsed remains of a storm shelter. The south wall has caved into the interior of the structure. Intact portions of the structure's walls rise 88 cm above the ground surface and 52 cm bs. Scattered inside the structure are beds springs, electric wire, and a small metal ashtray, as well as structural rubble.

A fractured concrete slab (Feature 2) is located 10 m south of the storm shelter. Next to the slab are two concrete-and-cobble footings laying on the ground surface. Ten meters northeast of the storm shelter are three fractured cement-and-cobble pillars. A fourth pillar base with metal strapping is present 10 m east of the shelter. All of these pillars appear to have been displaced when the government removed the structures from this site. Feature 3, a broken concrete slab, lies about 50 m south of Feature 2.

A gravel road leads to the site area and crushed gravel is found over approximately half of the site area. Artifacts observed at the site included manganese solarized glass, aqua glass, whiteware, tin cans, barbed wire, and clear glass. A scatter of rusted tin cans is present on the west side of the site. Nine shovel tests were excavated at this site, with six yielding historic artifacts. Twenty-nine items were recovered from the shovel tests, including glass fragments, nails, and ceramic fragments. There is very little sediment in the area, the ground surface being primarily granite cobbly land and granite outcrop. Total site area is estimated at 6,500 m² (Figure 59).

Historic Artifacts

Historic material was recovered from the surface and six shovel tests. Diagnostic artifacts recovered from the shovel tests consisted of gilded decalcomania decorated white-whiteware (1895-1990; Figure 60), white-whiteware fragments (1890-1990), a Boyd's opaque glass liner (1900-1950), manganese solarized fragments (1880-1990), and machine-made glass fragments (1910-1990). Ceramics collected from the surface included a high-fired ironstone fragment (1850-1910), bluish tint whiteware from West End Pottery (1893-1938), semi-porcelain and porcelain fragments, and a bristol exterior/interior stoneware fragment with cobalt blue stencil (1900-1950). Diagnostic glass material collected from the surface consisted of a Hazel-Atlas Glass Company jar base (1920-1964), a machine-made clear jar base (1910-1990), and manganese solarized fragments (1880-1990).

Summary

This site contains several features and a moderate density scatter of artifacts. While the site has suffered moderate to heavy disturbances, it is recommended that further archival research and testing be conducted to evaluate fully this site's potential for inclusion in the NRHP.

34Cm-498 (92-138)

This site is a historic farmstead located on the level plains south of the Wichita Mountains, west of West Cache Creek. There are five features present at this site, as well as a moderately dense scatter of historic

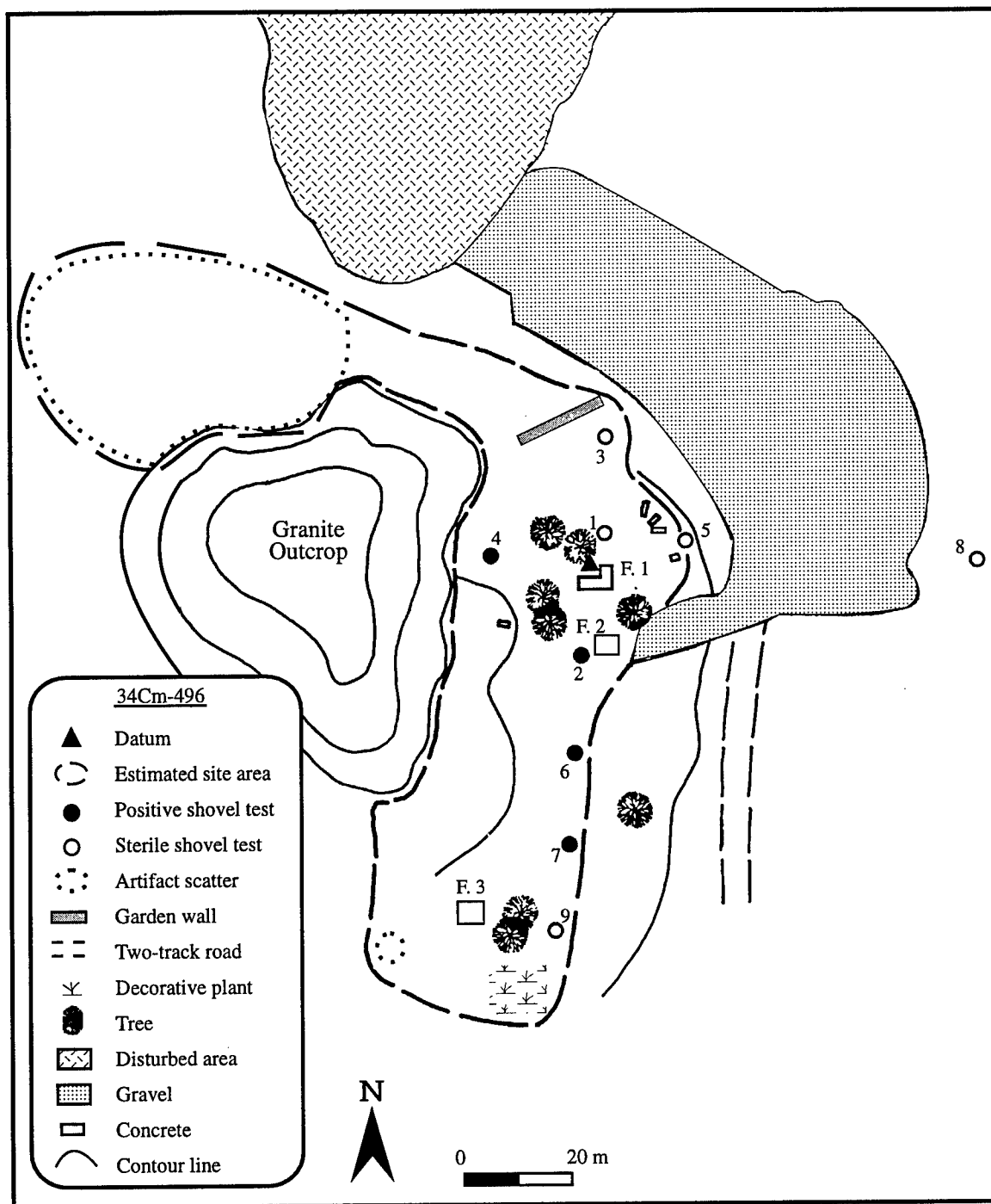


Figure 59. Plan map of 34Cm-496 (92-136).

artifacts. Soil at this location is mapped as Lawton loam, while the elevation is recorded as 390 m (1,280 ft) amsl. Vegetation observed in the area of the site consisted of hackberry, box elder, mesquite, post oak, honey locust, sumac, Johnson grass, long stem bunch grass, prickly pear cactus, and domestic iris.

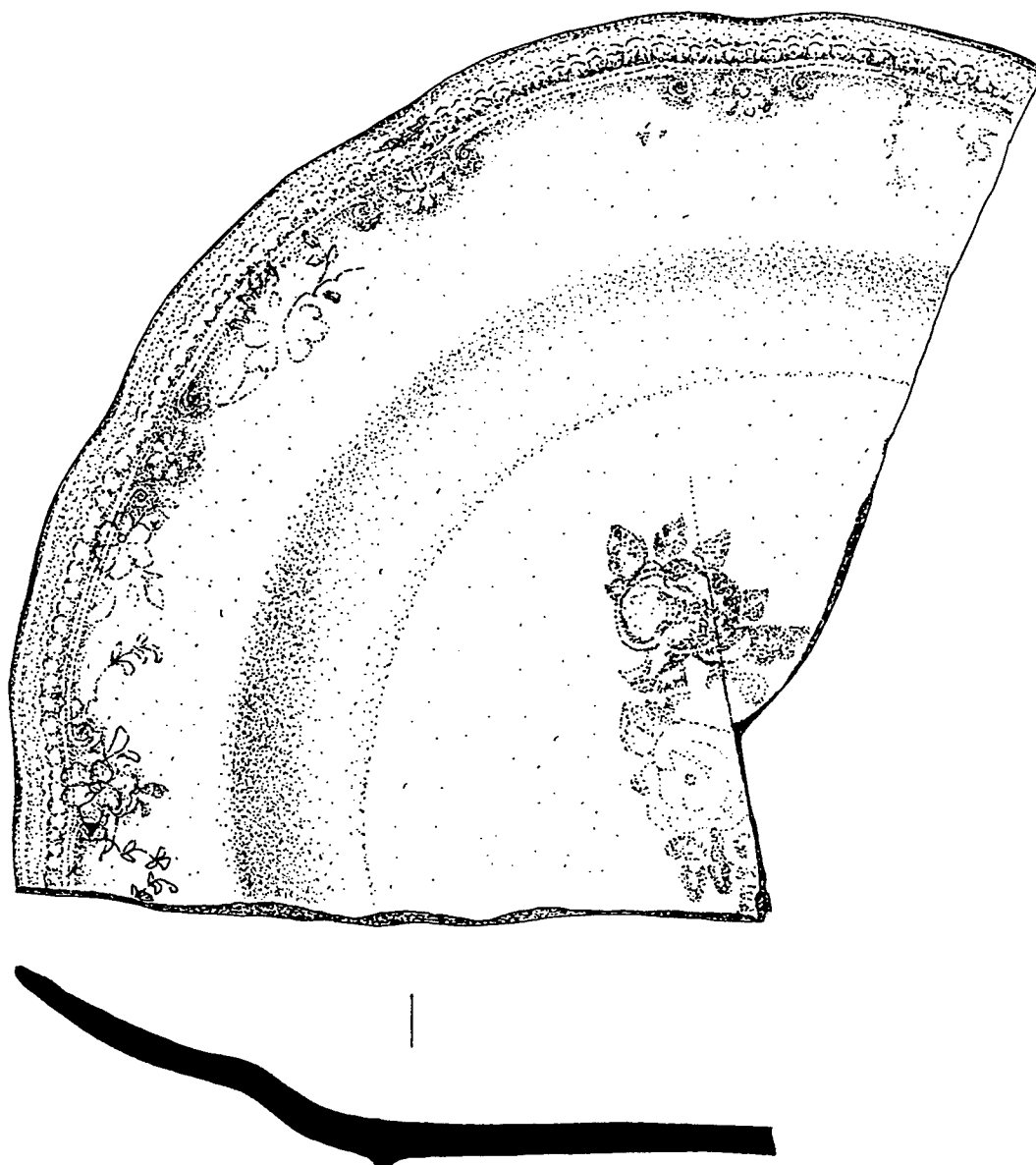


Figure 60. Historic artifact from 34Cm-496: whiteware with floral and gilded decalcomania. (Scale 1:1)

1992-1993 Cultural Resources Inventory: Fort Sill, Oklahoma

The five features at this site appear to have been constructed over a 30-to-40-year time period. Feature one consists of a pier-and-beam concrete house foundation, possibly dating to the 1920s. It measures 8 m x 9 m, with two 1-m wide concrete sidewalks extending east and west for 10 m. A 1-x-1-m depression was noted 2 m from the southwest corner of the house foundation.

Feature two is a 2-m² cinder block-and-concrete well housing that is 1.5 m deep. The third feature is a 2-x-3-m cinder block-and-concrete storm shelter with 2-m-wide concrete steps. Both of these features may date to the 1940s or 1950s. Feature four is a 4-x-10-m concrete slab with steel bolts around its edges. Feature five is a 2-m² concrete slab with a raised oval-shaped concrete housing, probably the remains of a well.

A historic trash dump is located approximately 50 m east of the house site on the small bluff near West Cache Creek. Within the site area were noted various glass fragments, whiteware, metal fragments, and a large concrete block with an attached steel loop (a tractor counterweight). The artifacts collected included press molded opaque green vessel glass, clear vessel glass, blue vessel glass, milk glass, and painted whiteware.

Nine shovel tests were excavated at this site, with four yielding historic materials. Items recovered from shovel tests included 12 glass fragments, three nails, a whiteware fragment, and a pencil eraser. All historic material was recovered between 0 cm bs and 15 cm bs, in a silty sandy soil. A single flake was recovered from Shovel Test 3, Level 1. This small flake is a coarse material that may be cortex from a chert cobble. The item measures 1.6 cm x 1.4 cm x .4 cm, and weighs 1.55 g. It is of questionable cultural origin. No other lithic material was observed on the ground surface or in any of the shovel tests. The site area is estimated at 4,400 m² (Figure 61).

Historic Artifacts

Historic material was collected from the surface and four shovel tests. Diagnostic material recovered from the shovel tests consisted of a fragment of light ivory tint whiteware (1920-1990), green milk glass tableware fragments (1920-1950), ash tint fragments (1915-1990), and wire nails (1880-1990). Diagnostic glass material collected from the surface included a Boyd's opaque liner (1900-1950), a milk glass fragment with painted exterior (1920-1950), an Illinois Glass Company bottle base (1916-1929), an Owens Bottle Company bottle base (1911-1929), and ash tint fragments (1915-1990). Ceramic surface material included fragments of white-whiteware (1890-1990), Fiestaware (1930-1960), and an exterior/interior bristol stoneware (1900-1990). A zinc canning jar seal (1869-1915) was also collected from the surface. A MBD of 1903 is estimated for the site based on the diagnostic historic material collected from the surface.

Summary

This site exhibits a number of moderate to well-preserved features and a high to very high density of artifacts. Further archival research and testing is recommended in order to evaluate fully this site's potential for inclusion in the NRHP.

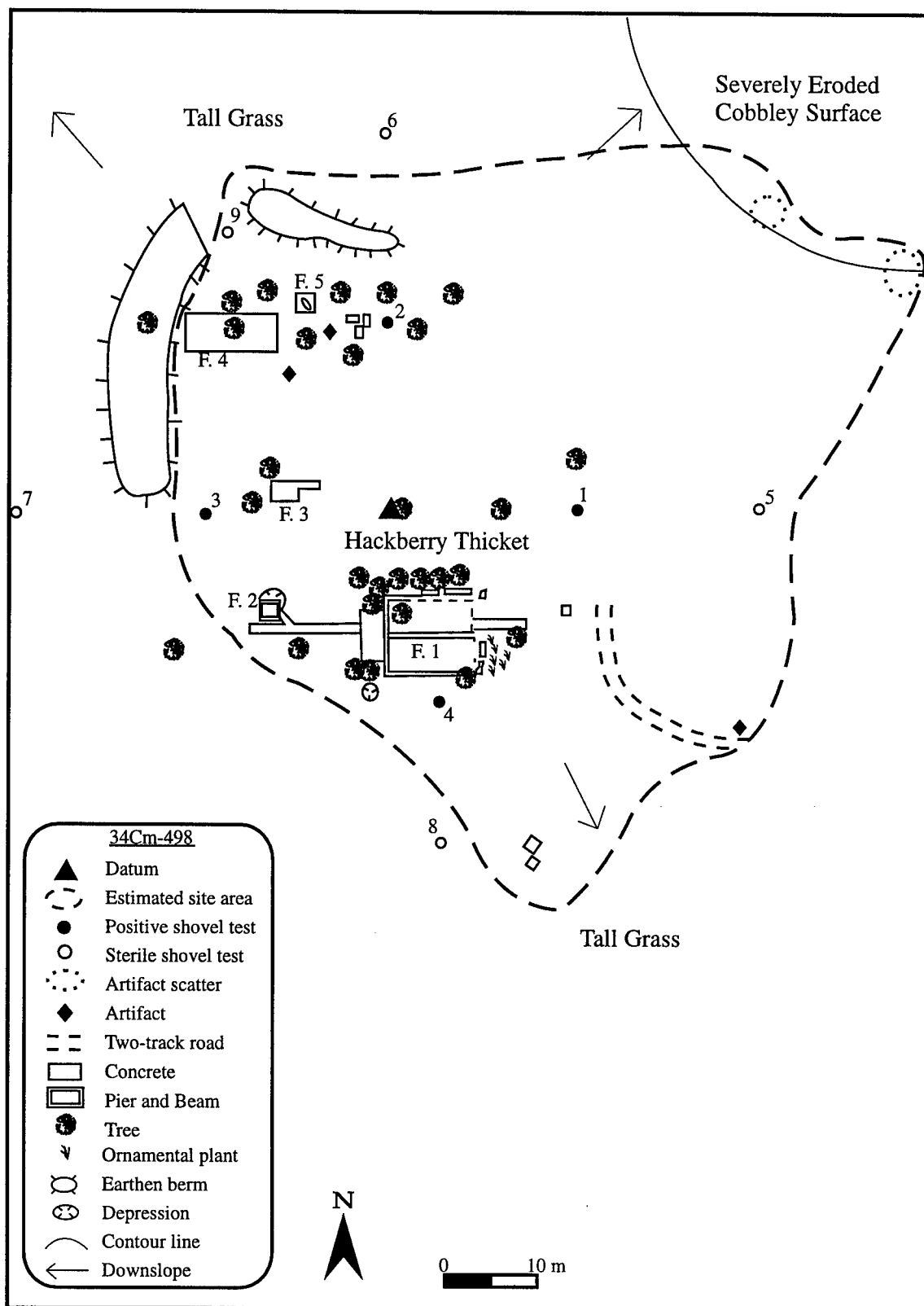


Figure 61. Plan map of site 34Cm-498 (92-138).

34Cm-500 (92-142): Birdsong Tavern

Site 34Cm-500 is a historic commercial and residential site. Local informants report that it belonged to Aubra Birdsong, Quanah Parker's son-in-law and Nedah Birdsong's father. Birdsong operated a tavern at this location; his house was either attached to or part of the tavern. The site is situated west of Highway 115, on the level plains south of the Wichita Mountains. The soil is mapped as granite cobbly land and the elevation is 415 m (1,361 ft) amsl. Vegetation observed in the area of the site consisted of juniper, post oak, mesquite, sumac, sunflower, aster, goldenrod, poison ivy, long stem bunch grass, mixed grasses, thistle, Texas rainbow cactus, and prickly pear cactus.

No intact features relating to the tavern, house, or storm shelter were observed at this site. Feature 1, the only intact feature on the site, is a 2-x-2-m concrete well cap with a 6-inch pipe and several steel bolts in the top. There are a few large fragments of concrete-and-granite cobble foundation and six large, pyramid-shaped concrete footings scattered in the site area. Concrete and rebar, a small flower bed of irises and a 7-x-4-m depression that may be the remains of the storm shelter (Feature 2) also were noted.

A moderate density scatter of brick, window glass fragments, and vessel glass fragments is scattered around the site's surface, but no concentrations were observed. Eight shovel tests were excavated, with only one test yielding historic artifacts. Material recovered included five glass fragments, one metal fragment, and a whiteware fragment. Artifacts were retrieved down to 17 cm, and the soil appeared disturbed. Site area is estimated as 6,200 m² (Figure 62).

Historic Artifacts

Historic material was collected from the surface and one shovel test. A tin aspirin box (ca. 1917) and one window pane fragment were recovered from the shovel test. Diagnostic material from the surface consisted of a Rockware Glass Company bottle (1930-1990), an ash tint bottle (1915-1990), and one amber bottle lip with a machine-made crown finish (1905-1990). One window pane fragment and two flat selenium glass fragments (1916-1930) were also collected. Metal artifacts included a cloth snap and a button.

Summary

While this site has the potential of being a significant example of an early twentieth century commercial enterprise, site condition is poor at best. Even so, it is recommended that further archival research plus testing be conducted to evaluate fully this site's potential for inclusion in the NRHP.

34Cm-501 (92-143)

The site is a mine shaft on the top of Quanah Mountain south of the communication antenna that is mounted on the peak of the mountain. The soil on the peak is mapped as granite outcrop, and the elevation of this site is 530 m (1,740 ft) amsl. Vegetation observed in the area of the site consisted of blackjack oak, juniper, long stem bunch grass, mixed grasses, goldenrod, and thistle.

The shaft measures 6 m x 5 m with a depth of 4.5 m. No artifacts were observed on the ground surface surrounding the shaft; a 2-x-4-m board was the only item observed in the mine shaft. No shovel tests were excavated due to the lack of soil in the site area. Site area is estimated at 590 m² (Figure 63).

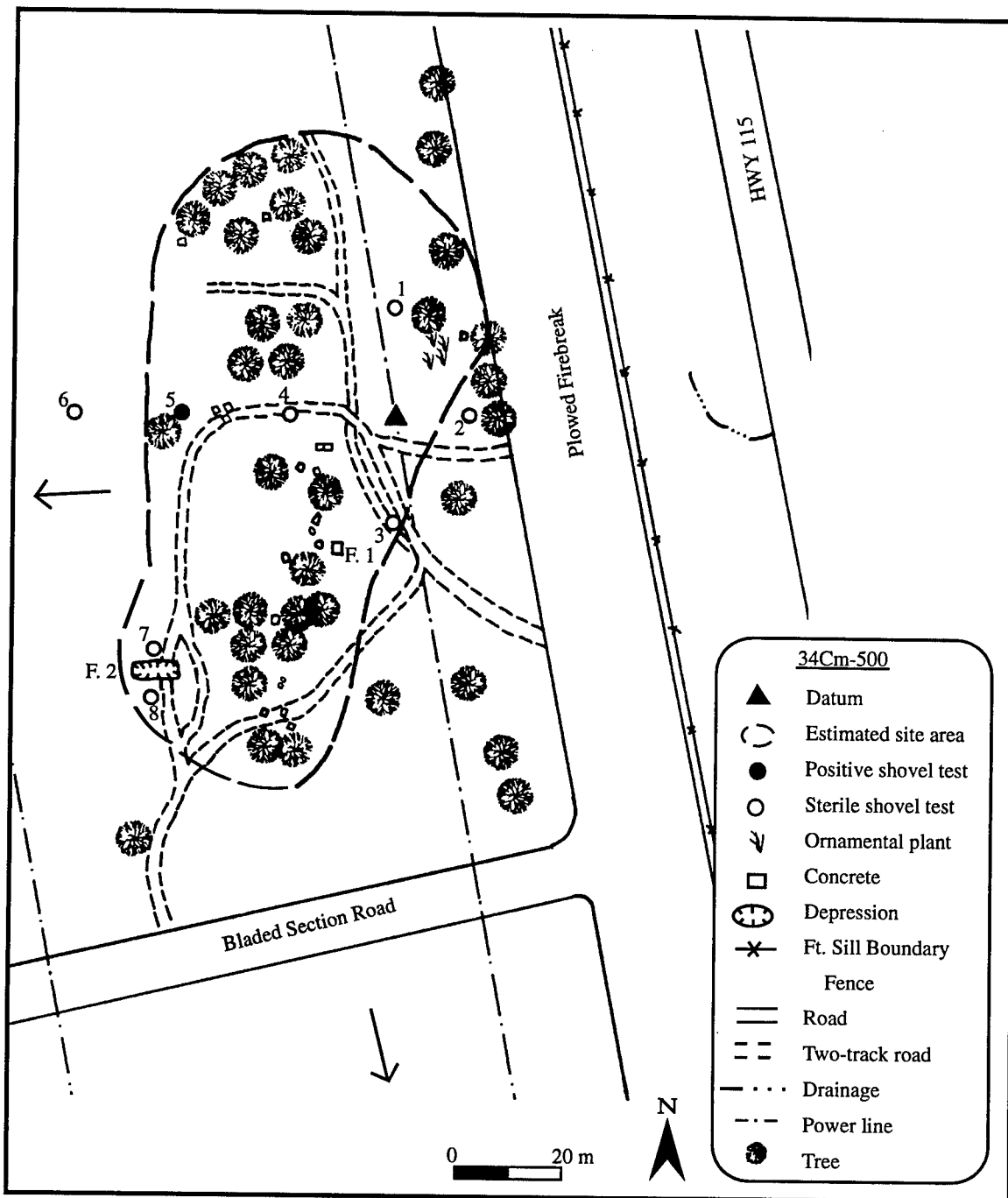


Figure 62. Plan map of site 34Cm-500 (92-142): Birdsong Tavern.

Summary

Since there are no structures, features, or diagnostic artifacts related to mining activities, this site has little research potential. No further archival research or testing is recommended, and this site is not recommended for inclusion in the NRHP.

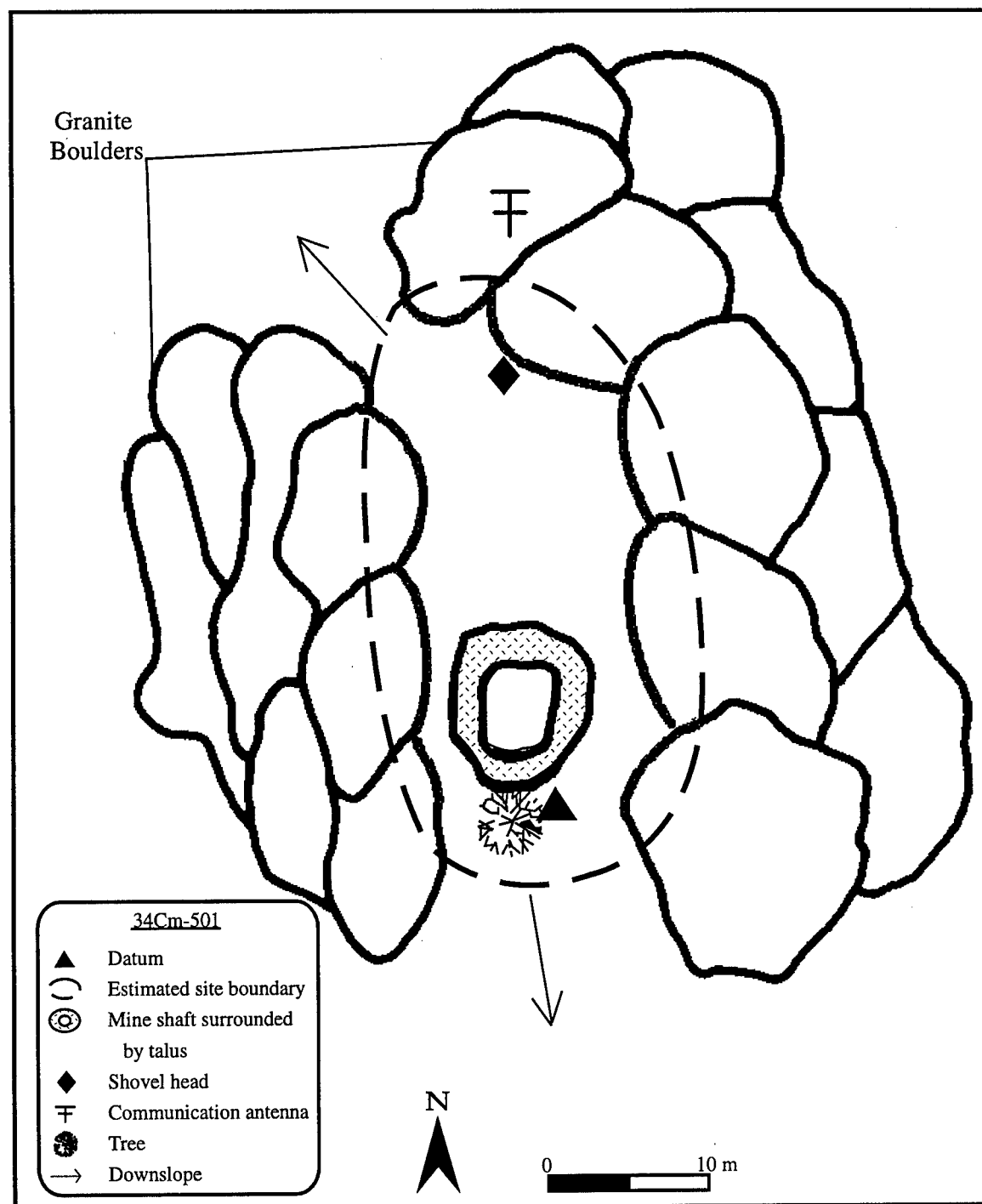


Figure 63. Plan map of site 34Cm-501 (92-143).

34Cm-502 (92-144)

The site consists of a mine pit located on the southern face of Quanah Mountain. Vegetation observed in the area of the site consisted of blackjack oak, juniper, long stem bunch grass, sumac, goldenrod, and thistle.

The shaft measures 4 m x 3 m and has a depth of 70 cm. A talus pile of granite and quartz extends for 2.5 m around the shaft. No artifacts were observed in the site area. No shovel tests were dug due to the lack of soil. The surface consists of granite cobbles and outcrop. The site area is estimated as 15 m² (Figure 64).

Summary

Other than the shallow mine pit itself, there are no structures, features, or artifacts related to mining activities located at this site. Because of this lack of material, this site is considered to have little research potential. No further archival research or testing is recommended, and this site is not recommended for inclusion in the NRHP.

Survey Area 4

Survey Area 4, located on the southwestern edge of the cantonment area, covers a total of 3,034 acres (Figure 65). This section of the project area consists of gently rolling plains with moderately rolling plains and hills in the vicinity of McKenzie Hill. Near-surface bedrock is granite and rhyolite porphyry conglomerate overlain by sand and gravel. McKenzie Hill consists of the remnants of limestone that once overlay this entire area.

The upland soils in this area are primarily Foard-Slickspots complex and Foard-Tillman soils. Vernon soils are located along the east, west, and southern edges, and limestone cobbly land is found on McKenzie Hill. Limited amounts of alluvial soils, Port-Slickspots complex and broken alluvial land, are recorded along East Branch Wolf Creek and its small west tributary; however, field observations indicate that these alluvial deposits may be more extensive than recorded. Other soils occurring include Hollister silt loam, as well as small amounts of Tillman clay loam and granite cobbly land.

East Branch Wolf Creek is the only drainage in this area named on the USGS topographic map; however, the drainages south of McKenzie Hill are nearly as large and may contain significant alluvial deposits. All drainages in this area are reported as intermittent. The flow observed in the East Branch Wolf Creek is maintained by a leak in the Lawton aqueduct that crosses the shallow valley of the creek.

Six sites and one ruin were previously recorded for this section of the survey. Five sites were relocated; these included prehistoric sites 34Cm-289, 34Cm-290, and 34Cm-310; historic site 34Cm-162; and site 34Cm-284, a historic site with a prehistoric component. Site 34Cm-308 and ruin R86 were not relocated. In addition, seven new prehistoric sites, four new historic sites, and seven localities were identified.

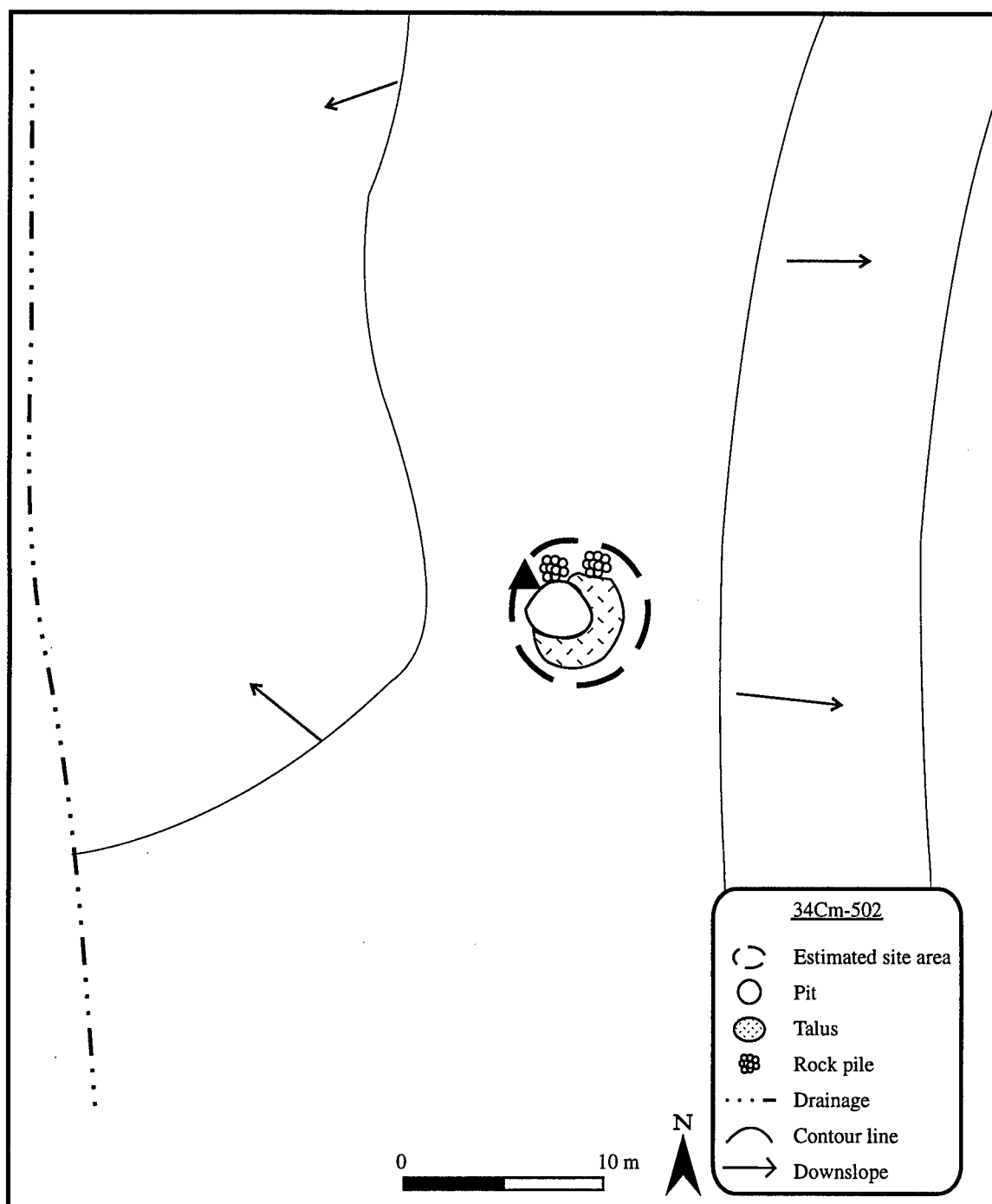


Figure 64. Plan map of site 34Cm-502 (92-144).

34Cm-449 (92-75): Beautiful Day

Site 34Cm-449 is either the possible location of a historic farmstead or may have been a limited activity area related to a farmstead located elsewhere on the fort. The site is located along an upland intermittent

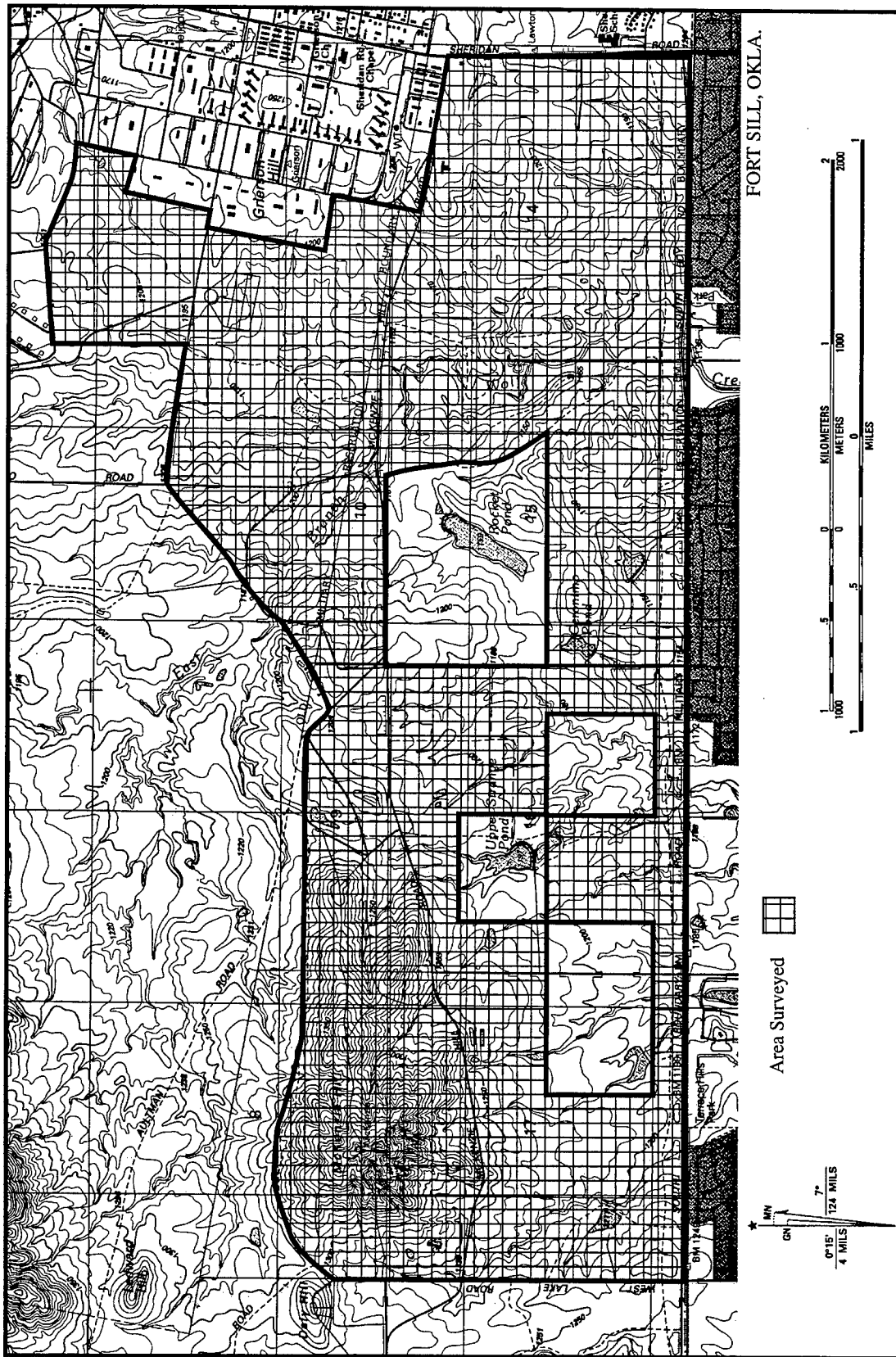


Figure 65. Location of Survey Area 4 within the Fort Sill Military Reservation.

drainage south of McKenzie Hill. The soil in this area is mapped as Vernon soils; site elevation is 369 m (1,210 ft) amsl. Vegetation observed in the area of the site consisted of oak, pecan, cottonwood, greenbrier, poison ivy, Johnson grass, and blue grass.

Two distinct features are located at this site plus a widely dispersed, low density scatter of historic artifacts on the eroded slope in the western half of the site. The features consist of a pump platform/well combination and a circular livestock trough. The pump platform measures 2.7 m x 1.4 m, with a well diameter of .8 m. The well is constructed from brick and concrete, while the pump section is built of concrete and slabs of limestone and may have been added at a later date. Inscribed in the concrete on the west side of the well is ". . . eautiful day Oct. 18 1928." The letters "M WIS" and "G.B.H." are inscribed on the northern side of the well.

The circular trough, like the pump base, is constructed of concrete and limestone with a 24-cm thick wall and a diameter of 3.5 m. In the southeast corner of the trough are 2-in and 3-in steel feeder pipes. The rest of the site contains a low density scatter of historic artifacts. Eight shovel tests were excavated at this site, but no subsurface materials were located. Site area is estimated at 1,800 m² (Figure 66).

If there were a farmstead at this location, the small flat rise at the western edge of the site area is the most likely location for a farmhouse. This area has been extensively altered and disturbed, resulting in over 95 percent ground surface visibility. No structural remains or any indications of a structure were observed, although the area is so disturbed that it is impossible to confirm or deny the possibility of a farmhouse having been located at this site without further archival research.

Historic Artifacts

Historic artifacts observed on the surface included two historic redware fragments, possibly from a flowerpot or from a historic crockery sewer pipe. Two metal fragments and one glass fragment were also observed.

Summary

This site has no features other than a well and stock trough, and a low density scatter of artifacts. No historic farmsteads are known to have been located within 500 m of this site, making it difficult to associate this site with any historic farmsteads. Further archival research and testing is not recommended, and this site is not recommended for inclusion in the NRHP.

34Cm-450 (92-76)

This site is a historic farmstead site located in a thicket of black locust saplings intermixed with mature post oak, catawba, cottonwood, and hackberry trees. The site is located north of McKenzie Hill Road at the foot of a low ridge; McKenzie Hill itself is located west of the site area. The soil is mapped as Hollister silt loam; the site elevation is 374 m (1,228 ft) amsl. Besides the trees mentioned above, vegetation observed in the site area consisted of sumac, Johnson grass, coyote gourd vines, and sunflower.

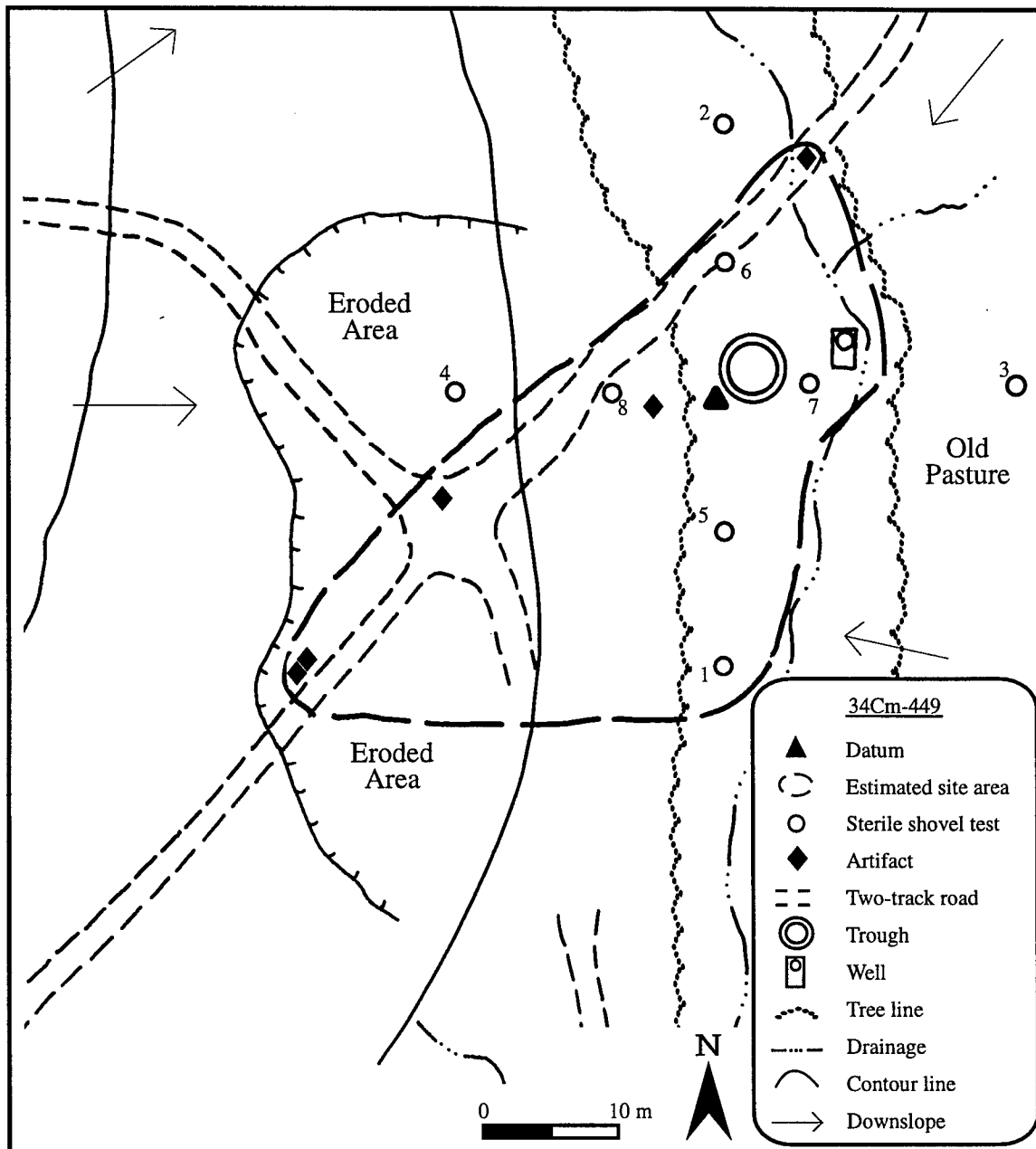


Figure 66. Plan map of 34Cm-449 (92-75): Beautiful Day.

Three features are located within this site. The first (Feature 1) is an unusual concrete-and-limestone storm shelter with an arching limestone roof. This structure is 8 m long, 2.5 m wide, and 2 m deep. Feature 2 is a 1.5-m² concrete windmill base adjacent to the storm shelter's steps. The final feature (Feature 3) is a 1.22-m diameter circular steel cistern with 5-in steel pipes for water intake purposes. This feature is situated 15 m southeast of the storm shelter.

Also observed at this site are two flat areas that may have supported structures. One of these areas is immediately south of the storm shelter and is associated with several large concrete slabs. The second area is 40 m north of the shelter.

A large surface scatter of historic artifacts is spread across the entire site area. Nine shovel tests were excavated, with five yielding historic material to a depth of 17 cm. Site area is estimated at 4,500 m² (Figure 67).

Historic Artifacts

Historic artifacts were recovered from five shovel tests and from the surface at this site. Diagnostic material collected from the shovel tests consisted of ash tint glass bottle fragments (1915-1990), wire nails (1880-1990), and two white-whiteware ceramic fragments (1890-1990). Other shovel test material included mortar fragments, an iron clamp, and an opaque jar liner. Diagnostic material from the surface consisted of gilded decalcomania decorated semi-porcelain fragments (1895-1950) and an ash tint salt/pepper shaker (1915-1990). Also collected from the surface was a tin spoon and a wood stove panel.

Archival Research

The land on which site 34Cm-450 is located was part of a Euro-American homestead in Section 9. Four different families owned the land between the time the patent was issued for the parcel in 1905 and 1908 (Comanche County *Deed Books* 6:609, 11:406, 30:344, 32:302, 35:536, 61:292, 77:290, 84:222). For the 25-year period between 1908 and 1933, one family, the Simcoes, owned the land (Comanche County *Deed Books* 69:297, 84:222, 230:550, 235:82, 565-566, 567-568). Subsequently, the area where the site is located was owned by J. W. Tucker and later, A. Strange, from whom the U.S. government took the land in 1940 (Comanche County *Deed Books* 236:607, 247:246, 261:425-426).

The earliest entries in Comanche County *Deed Books* dealing with this property are mining claims. In September and November 1901, two mining claims were made in the area. The first claim was for all of Section 9 (Comanche County *Deed Books* 2:322). The second claim was for 40 acres in the southeast of Section 9. This claim, made by D. C. and E. L. Burson, was for "oil and all Placer Mineral[s]" (Comanche County *Deed Books* 3:187). D. C. and E. L. Burson are presumably David and Emma Burson, later the first owners of the land parcel that contains this site.

The U.S. government granted David Burson of Comanche County a receipt for 40 acres of Section 9, Township 2 North, Range 12 West on 30 April 1903. Burson paid \$53.34 for the property (Comanche County *Deed Books* 6:609). He obtained a patent for the land on March 22, 1905 (Comanche County *Deed Books* 11:406), and in April of that same year took out a \$360 mortgage on the property (Comanche County *Deed Books* 12:31). In March 1904, Burson quit claim deeded the land to his wife Emma for \$1.00 (Comanche County *Deed Books* 30:344). Emma and David Burson signed articles of agreement with Jennie Martin in May 1904, stating that they would deed their portion of Section 9 to Martin in exchange for \$1,500, to be paid in several installments (Comanche County *Deed Books* 32:302). The Bursons were living in Los Angeles, California, by May 1905.

Martin obtained the warranty deed and assumed the \$350 mortgage for the property in Section 9 on June 14, 1905 (Comanche County *Deed Books* 32:302). The mortgage was released February 26, 1907

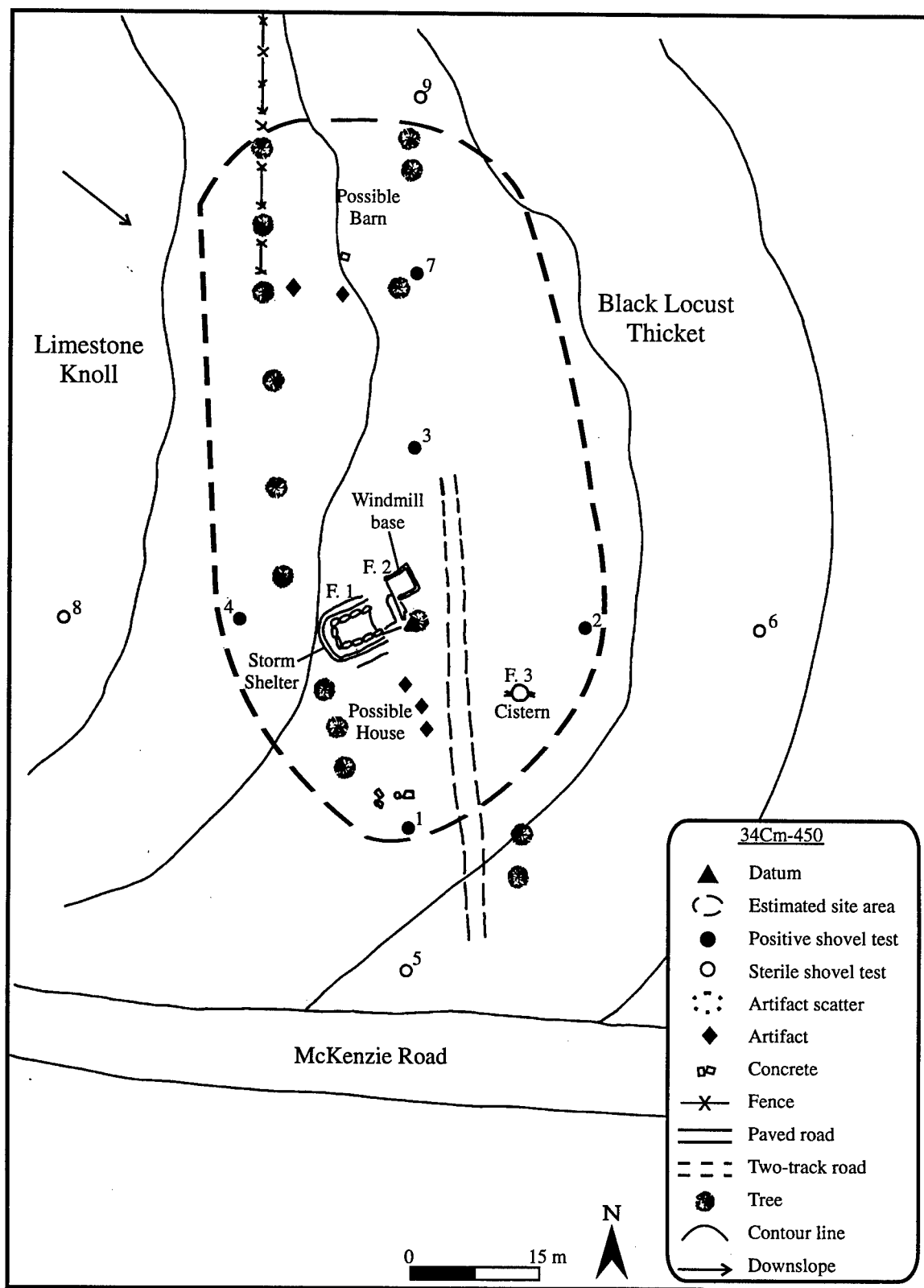


Figure 67. Plan map of site 34Cm-450 (92-76).

(Comanche County *Deed Books* 34:114). Martin and her husband Charles took out a \$500 mortgage on the property with Lydia D. Barber on the same day they obtained title to the land (Comanche County *Deed Books* 27:545). The mortgage was released in September 1905 (Comanche County *Deed Books* 34:364). The Martins took out a second mortgage with G. F. H. Barber. The second mortgage later was released (Comanche County *Deed Books* 45:594).

The land changed hands for the third time when the Martins deeded the property to Janie Steele Denham for \$2,600 in September 1906 (Comanche County *Deed Books* 61:292). Denham owned the land for less than a year. A Mrs. Susan E. Davis obtained a mortgage from Denham in May 1907 (Comanche County *Deed Books* 62:580). Janie Steele Denham and her husband, W. R. Denham, deeded the property to Davis in May 1907 (Comanche County *Deed Books* 77:290). In January 1908, John H. Simcoe obtained the property from Davis, described in the deed as a single woman, for \$5,000. Simcoe assumed a \$2,000 mortgage (Comanche County *Deed Books* 84:222) and took out a mortgage with Janie S. Denham in January 1908. This mortgage was released in 1909 (Comanche County *Deed Books* 69:297).

The land remained in the hands of the Simcoe family until the 1930s. It seems likely that at some time before or during the spring of 1933, John H. Simcoe died and willed the land to relatives. By that year, ownership of the property was divided among at least 16 people. In April 1933, the owners began consolidating their interest in the property in the hands of one individual, G. W. Simcoe, of Calloway County, Missouri. In April 1933, Rueben Simcoe and his wife Rosie (possibly Rosa), and Edgar Smith and his wife Nellie Smith of Calloway County, Missouri, deeded their interest in the 40 acres for \$1.00 to G. W. Simcoe (Comanche County *Deed Books* 230:568). Alma Thomas, "a single person of Portland of the County of Muletnomah and State of Oregon" deeded her interest in the 40-acre parcel in Section 9 to G. W. Simcoe for \$1.00 (Comanche County *Deed Books* 230:567). Albert E. Smith and his wife quit claim deeded their interest in the same land to G. W. Simcoe (Comanche County *Deed Books* 230:566), as did Benjamin and Helen Simcoe of San Diego County, California (Comanche County *Deed Books* 230:565). In May 1933, James Simcoe and his wife Belle, John Simcoe and his wife Edith, Katherine Simcoe (single), Margaret Simcoe (single), and Julia Simcoe (single) of Sonoma County, California, quit claim deeded their interest in the 40 acres to G. W. Simcoe (Comanche County *Deed Books* 235:82). In August 1933, Marshall C. Smith of Sebastian County, Arkansas, a single man, also quit claim deeded his interest in the 40 acres to G. W. Simcoe (Comanche County *Deed Books* 230:550).

G. W. Simcoe deeded the property for \$1.00 to J. W. Tucker on May 12, 1934 (Comanche County *Deed Books* 236:607). Tucker and his wife, Myrtle, took out a mortgage for \$1,200 on the land in August 1934. The Tuckers probably resided in Comanche County, as they appeared before a notary in Comanche County in August 1934 (Comanche County *Deed Books* 238:124). A. Strange obtained the Warranty Deed for the property for \$1.00 in September 1937. He also agreed to assume the \$1,200 mortgage and to allow the Tuckers to live in "the residence building on said tract" until January 1, 1938 (Comanche County *Deed Books* 247:426). A. Strange held the land for approximately three years, until 1940, when it became part of a large tract taken from Strange and his wife Geneva by the U.S. government (Comanche County *Deed Books* 261:425-426; Fort Sill Real Property Office 1944:n.pg.).

The 25-year period of Simcoe family ownership of the land seems the most likely time that the farmstead site with its elaborate stone storm shelter would have been constructed. However, the Simcoes could have let an unrecorded lease, and the lessee might have built the farmstead. Finally, it is possible that the farmstead was constructed by an owner previous to the Simcoe family, or by the Tuckers or A. Strange.

Summary

This site includes one of the most unusual storm shelters observed at Fort Sill, along with a number of additional features and a high to very high density of artifacts. Further testing and additional archival research is recommended to evaluate fully this site's potential for inclusion in the NRHP.

34Cm-451 (92-77)

This site represents a historic farmstead site with only the remains of a storm cellar currently extant. The site is located on the level plains south of McKenzie Hill, at an elevation of 372 m (1,220 ft) amsl. The soil is mapped as Foard-Slickspots complex. Vegetation observed in the area of the site consisted of mesquite, bois d'arc, Johnson grass, mixed grasses, and sunflower.

The only feature at this site is a 4-m² depression that exhibits three corners lined with unmortared, quarried limestone slabs. A larger limestone slab, measuring 162 cm x 92 cm x 16 cm, is located on the ground surface at the eastern end of this depression. No other structures were observed at this site.

A moderately dense surface scatter of historic artifacts extends for 110 m SE-SW and 25 m NW-SE. Eight shovel tests were excavated, with four yielding historic material. The material recovered in these shovel tests was primarily architectural material. The site area is estimated at 3,300 m² (Figure 68).

Historic Artifacts

Historic material was recovered from the surface and four shovel tests. Three diagnostic artifacts were collected from the shovel tests and consisted of one white-whiteware fragment (1890-1990), a manganese solarized (amethyst) bottle fragment (1880-1920), and an ash tint bottle fragment (1915-1990). Other nondiagnostic material collected from the shovel tests included four glass fragments, six pieces of coal, and three brick fragments. Surface glass material included aqua bottle fragments (1860-1990), an aqua machine-made bottle (1910-1990), ash tint bottle fragments (1915-1990), and manganese solarized bottle fragments (1880-1920). Three white-whiteware ceramic fragments (1890-1990) were recovered from the surface. Other artifacts collected from the surface included opaque jar liners, a metal fastener, and a spark plug.

Archival Research

Site 34Cm-451 is located on land that was part of an allotment belonging to Horace Jones, a long-time interpreter for the Comanche. Jones was one of five non-Native American "friends of said Indians, who have rendered to said Indians valuable services," who were allotted land (Dale and Rader 1930:543). It is possible that Jones lived on the land for a short period of time; however, the allotment was sold by his sister and heir in 1903 (Comanche County *Deed Books* 15:194). Between 1903 and the taking of the land by the U.S. government in 1940, the acreage was owned by eight different individuals, families, and groups of investors. The last owner of the land, A. Strange, held it for 11 years, the longest of any owner between 1903 and 1940. The parcel changed hands an average of once every five years between 1903 and 1940, not including sales within individual families (Comanche County *Deed Books* 59:566, 122:190, 141:85, 166:436, 198:180, 274, 222:37, 261:425-427).

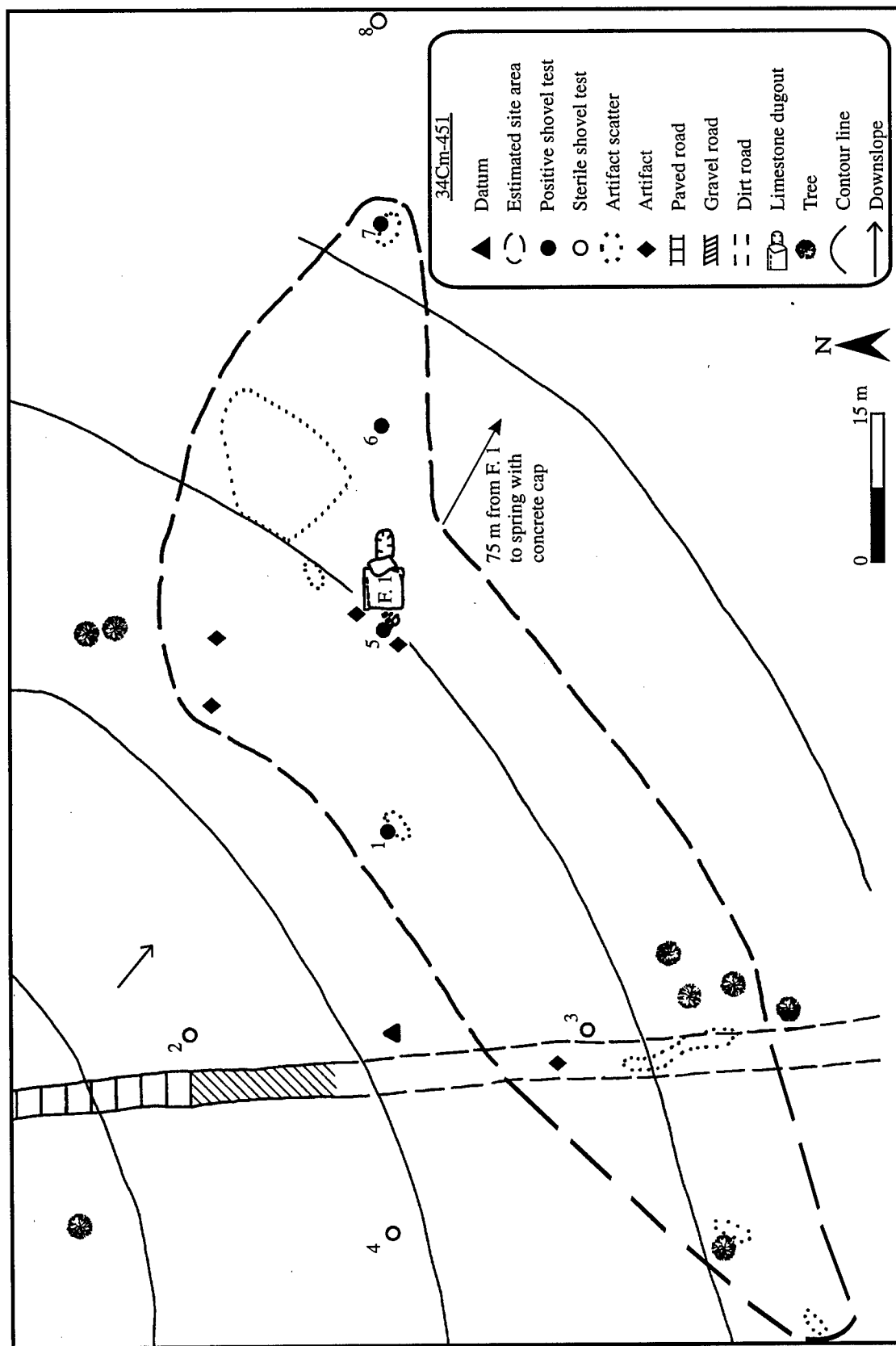


Figure 68. Plan map of site 34Cm-451 (92-77).

One mining claim is recorded in the Comanche County *Deed Books* for this quarter section of land. John Wilson, M. Main, Frank Wise, J. D. Neal, W. D. Day, A. J. Harrison, Maggie Day, and J. W. Malcom posed a notice for the Maud K. Placer Mining Claim in Section 16 in June 1902. They claimed all "petroleum, crude oil, naphtha . . . gas, asphaltum, and all veins . . . lodes or deposits" in the area Comanche County *Deed Books* 3:451).

Horace P. Jones, interpreter for the Comanche, was allotted part of Section 16 (Anonymous n.d.:21). It is not clear if Jones ever lived on the land allotted to him. By 1903, he was no longer alive, and his heir, Sarah E. Jones, sold the land to Warren Dunbar for \$1,900 (Comanche County *Deed Books* 15:194). Sarah E. Jones lived in Lee County, Texas (Comanche County *Deed Books* 122:190). Warren Dunbar and his wife Emma took out a mortgage for \$1,725 with George M. Paschall in October 1903, which was released in December of that same year (Comanche County *Deed Books* 16:163). The Dunbars then took out a \$1,000 second mortgage on the land in December 1903, which was released in September 1906 (Comanche County *Deed Books* 26:326). Warren and Emma Dunbar let a coal, oil, and gas lease on part of Section 16, as well as on other parts of their land. The document states that the Dunbars, who lived in Lawton, leased the land to W. A. Gray and Charles MacRitchie of Chicago. The lessors reserved 300 feet around all buildings on the land at the time of the lease, as well as the right to continue to use the land for "the purpose of tillage" (Comanche County *Deed Books* 32:103). The lessees had to complete a water well within two years of the commencement of the lease (Comanche County *Deed Books* 32:103). The lease was later released (Comanche County *Deed Books* 56:205).

The Dunbars sold the land to D. J. Chesnut on October 14, 1905, for \$3,500. Chesnut agreed to pay the remainder of a \$1,000 mortgage on the land (Comanche County *Deed Books* 59:566). Chesnut and his wife, Mary, took out a \$1,000 mortgage on the land in May 1906 with G. A. Denham of Williamsburg, Kentucky (Comanche County *Deed Books* 45:567). The mortgage was released in September 1906 (Comanche County *Deed Books* 56:444).

The Chesnuts deeded the land to Fountain City Townsite and Improvement Company in September 1906 for a reported \$25,000 (Comanche County *Deed Books* 61:385). If correct, this figure is over eight times as much as the Chesnuts paid for the land, and large in comparison to the usual sum obtained for Comanche County real estate at the time. Although the secretary and president appeared before a notary in Comanche County at least once, they also visited a notary in Worcester County, Maryland (Comanche County *Deed Books* 117:373, 141:85). Thus, it is possible that most, if not all, shareholders of the Fountain City Townsite and Improvement Company lived outside of Oklahoma. Among the shareholders of the Fountain City Townsite and Improvement Company were D. T. Chesnut, Mary F. Chesnut, W. B. Sutton, F. M. English, W. F. Barber, and A. C. Maupen. The plat of Fountain City was recorded on December 26, 1906 (Comanche County *Plat Books*:17-18). It depicts an "Enid and Southwestern Railroad" running through the town. The projected construction of a railroad through the area may help explain why investors would have entrusted their money to the townsite scheme. The railroad was never built through the platted townsite and the plat was vacated and set aside in November 1911 (Comanche County *Deed Books* 117:373).

Fountain City sold the land to Joe Howenstine in November 1911 for \$8,000 (Comanche County *Deed Books* 141:85). Howenstine, a single man, took out a \$3,000 mortgage with George A. Purington in December 1911 (Comanche County *Deed Books* 107:171). The mortgage was released in November 1918 (Comanche County *Deed Books* 107:171). In 1913, Joe Howenstine deeded an undivided one-third interest in Section 16 to Cy Howenstine for \$1.00. In return, Cy Howenstine agreed to pay one-third of the \$3,000 mortgage (Comanche County *Deed Books* 150:235). Joe Howenstine also deeded one-third interest in the

property to J. F. Howenstine, for \$1.00. J. F. Howenstine accepted responsibility for one-third of the \$3,000 mortgage (Comanche County *Deed Books* 150:236). Cy Howenstine and his wife Helen then deeded their one-third interest in the land to J. F. Howenstine for \$1.00. J. F. Howenstine then took over their third of the mortgage. Since Cy and Helen Howenstine appeared before a notary in Custer County, Oklahoma, it is possible that they did not live on the Comanche County land (Comanche County *Deed Books* 162:410). In April 1918, J. F. Howenstine and his wife Bessie took out a \$3,500 mortgage on the land that was released October 24, 1925 (Comanche County *Deed Books* 196:501). J. F. and Bessie Howenstine took out a second mortgage on the land in May 1918 (Comanche County *Deed Books* 142:209). The second mortgage was released in April 1923 (Comanche County *Deed Books* 149:399). Joe Howenstine and his wife Alice deeded their undivided one-third interest in the property to J. F. Howenstine in May 1918. J. F. Howenstine also agreed to take over Joe Howenstine's one-third of the \$3,000 mortgage (Comanche County *Deed Books* 162:594).

J. F. and Bessie Howenstine sold the property to William P. Driver for \$9,350 in March 1919 (Comanche County *Deed Books* 166:436). Driver took out an \$87.50 mortgage on the land in April 1923 (Comanche County *Deed Books* 142:282). Driver sold the property to Lizzie Hill in August 1924 along with property in Section 15 and Section 21, all in Township 2 North, Range 12 West (Comanche County *Deed Books* 198:180). The \$87.50 mortgage was released in November 1925 (Comanche County *Deed Books* 196:503).

Lizzie and James B. Hill, possibly her husband, sold the land in Sections 15, 16, and 21 two months later to W. C. Wood and his wife Anna for \$1.00 and the assumption of repayment of a \$6,000 loan not recorded in the Comanche County *Deed Books* (Comanche County *Deed Books* 198:274, 200:111-112). The Wood family owned the land for approximately five years. Wood and his wife took out a \$3,500 mortgage on the land with W. K. Miller in November 1924 (Comanche County *Deed Books* 190:399), which was released the next month (Comanche County *Deed Books* 177:565). Another mortgage was taken out by W. C. and Anna Wood in 1925 (Comanche County *Deed Books* 200:111-112). This mortgage was released in January 1929 (Comanche County *Deed Books* 209:177). The Woods took out a third mortgage in October 1925, this one for \$3,500 (Comanche County *Deed Books* 190:590). This mortgage was paid in full in May 1927 (Comanche County *Deed Books* 207:463). A fourth mortgage was taken out in 1927 for \$4,185 (Comanche County *Deed Books* 188:621), and released in December 1928 (Comanche County *Deed Books* 202:303).

A. W. Strange bought the properties contained in Section 16 and Section 21 from Anna and W. C. Woods in January 1929 (Comanche County *Deed Books* 222:37). Strange owned the land for 11 years before it was taken by the government. The United States filed a declaration of taking in November 1940 for approximately 1,160 acres of land owned by A. Strange in Comanche County, including the land originally allotted to Horace P. Jones (Comanche County *Deed Books* 261:425). Any of the owners of this property or their lessees could have been responsible for the historic farmstead found at this location.

Summary

The site originally was considered to have potential research value because of its possible connection with Horace Jones. However, because of the short period of time the allotment was owned by Jones, and the frequent changes of ownership thereafter, it is not likely that the farmstead was constructed or occupied by Jones. Thus, the potential for this site to provide information about Horace Jones or Comanche lifeways or history is low. Due to the frequency of ownership changes between 1903 and government acquisition

of the land in 1940, it is unlikely that one family continuously occupied the site for an extended period of time. Therefore, the deed title history of the property also indicates that the research value of the site for Euro-American culture and history is low.

This site contains only one feature, which is almost destroyed, a moderate density scatter of domestic artifacts, and subsurface material that is primarily architectural in origin. Deep ruts cross most parts of the site area. The impacts to this site are so severe that the site's research value has been compromised. No further testing or additional archival research is recommended, nor is this site recommended for inclusion in the NRHP.

34Cm-162 (92-85): Camp Doniphan Dump

Site 34Cm-162 is a historic dump associated with the World War I training camp known as Camp Doniphan. Originally recorded on the east bank and floodplain of East Branch Wolf Creek, the current investigations have also located World War I artifacts upslope to the east of the original site area. The upper portions of the site area are mapped as Vernon soils; the lower areas next to the creek are mapped as Port-Slickspots complex. Elevation of the site ranges from 354 m (1,160 ft) amsl on the west to a high of 363 m (1,190 ft) amsl on the east. Vegetation observed in the area of the site consisted of mesquite, long stem bunch grass, black-eyed Susan, goldenrod, and ragweed.

Initial investigations at this site placed 15 shovel tests on the ridge bordering the east side of East Branch Wolf Creek's shallow valley. Only one test unit contained historic material, a metal bolt found at 10 cm bs. An additional six items were found on the ground surface, including a watch/compass combination that is believed to date to World War I, and cartridges dating to that period.

After consulting with Louis Vogele of the Fort Sill Environmental Directorate, the site was revisited. Twenty-one additional shovel tests were excavated down the ridge slope and parallel to East Branch Wolf Creek. Additional surface artifacts were observed on the ground surface bordering the creek, primarily glass and ceramics with some metal fragments. Two shovel tests bordering the creek yielded glass and metal fragments to depth of 25 cm bs. Due to the compactness of the soils in this area, few shovel tests were able to penetrate below 20 cm, even with the aid of pick axes. Mechanical testing will be necessary to evaluate fully this site, which is estimated to cover some 95,000 m².

The upper, eastern portion of the site has been grossly disturbed by the mechanical removal of surface sediments to a depth of 3 m and at least one acre in extent. In addition, this area is littered with MRE wrappers, plastic spoons and forks, and other military trash. The lower portion of the site has been disturbed by the construction of the Lawton aqueduct. The aqueduct crosses through the site area (Figure 69).

Historic Artifacts

Twenty-two artifacts were recovered from the surface and three shovel tests. Material recovered from the shovel tests included four aqua bottle fragments from the Adolphus Busch Company (1904-1907; Figure 70), a lead ball from the canister type weapons of World War I and II, and a threaded bolt. Surface material included a pocket watch, a military issue artillery M83 cannon primer (post-1965), and military issue LS cartridges.

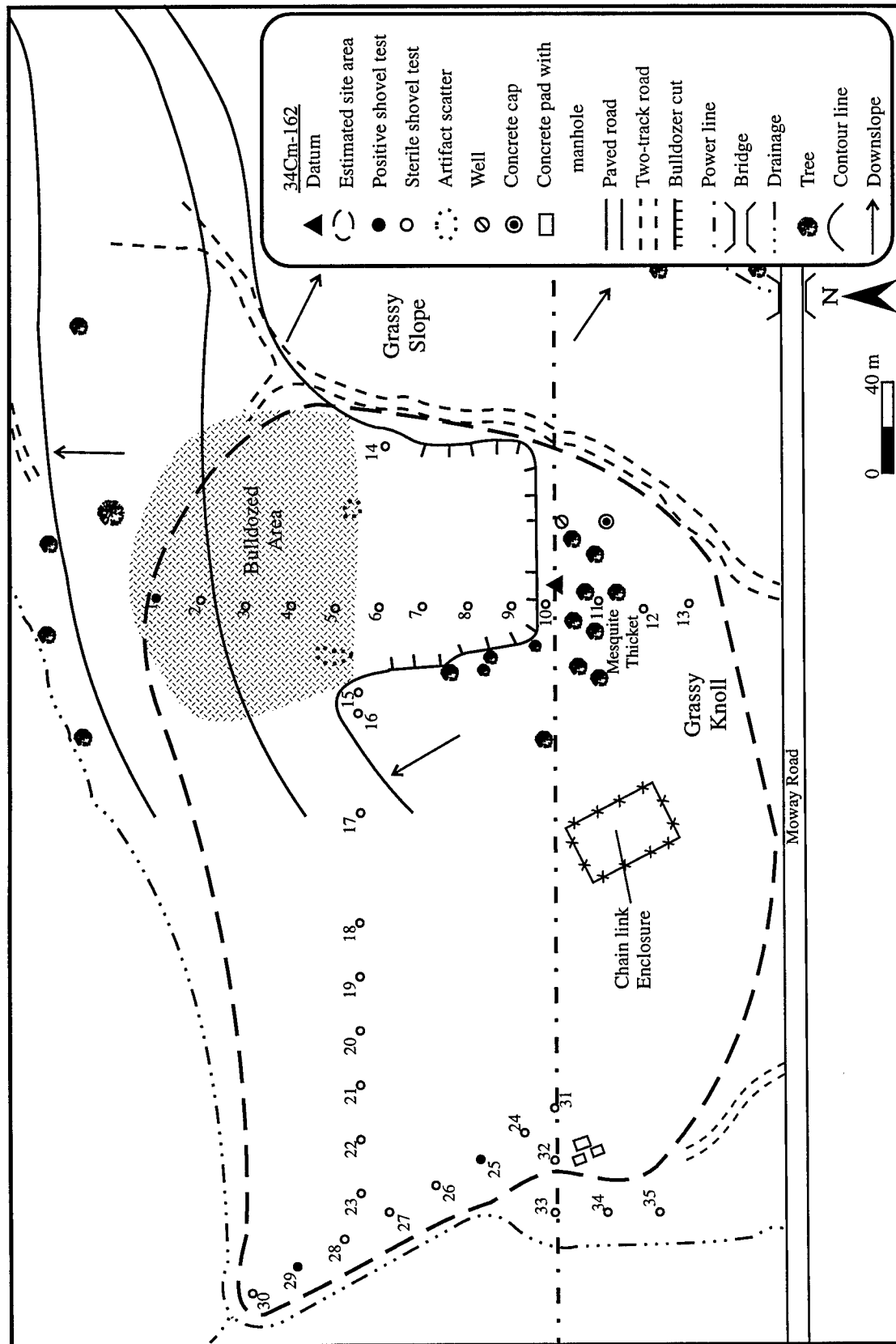


Figure 69. Plan map of site 34Cm-162 (92-85): Camp Doniphan Dump.

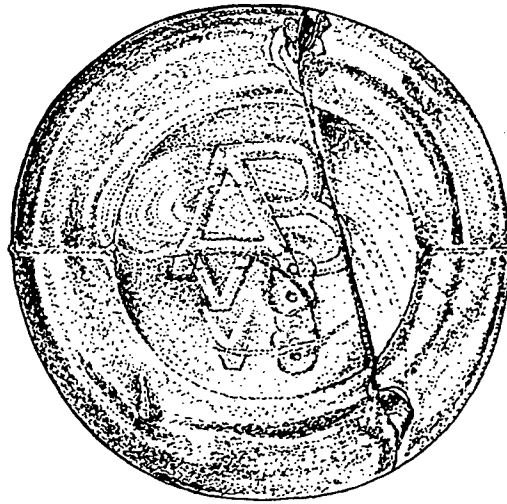


Figure 70. Historic artifact from site 34Cm-162: aqua bottle base with Adolphus Busch Company mark. (Scale 1:1)

Summary

A more thorough examination of this site is necessary in order to evaluate fully site integrity and its potential for inclusion in the NRHP. Mechanical testing and additional archival research is recommended.

34Cm-465 (92-97)

This site is a very low density lithic scatter located on East Branch Wolf Creek's floodplain, 60 m from the creek. The area in which the site is located was formed by a large meander in the creek that created a 10-acre meadow. The creek borders three sides of the meadow; deeply dissected uplands border the western end. The soil in the immediate site area is mapped as Port-Slickspots complex with Vernon soils to the west in the uplands. Site elevation is 351 m (1,150 ft) amsl. Vegetation observed in the area of the site consisted of post oak, pecan, greenbrier, sumac, low growing scrubs, mixed grasses, thistles, and wildflowers.

Survey of this area located five pieces of lithic debris, a hammerstone, and a biface on the surface of a bare soil slickspot. Six shovel tests were excavated around the surface finds but no buried cultural material was recovered. However, shovel tests were only able to penetrate to a depth of 10 cm bs due to the extreme compactness of the soils. A thorough investigation of this site would require mechanical excavation.

A berm and depression are located on the south side of the site, indicating that the area has been subjected to some disturbance. No other berms were visible in the area of the site. Site area is estimated at only 50 m² (Figure 71), but there is a potential for additional buried deposits outside this small area.

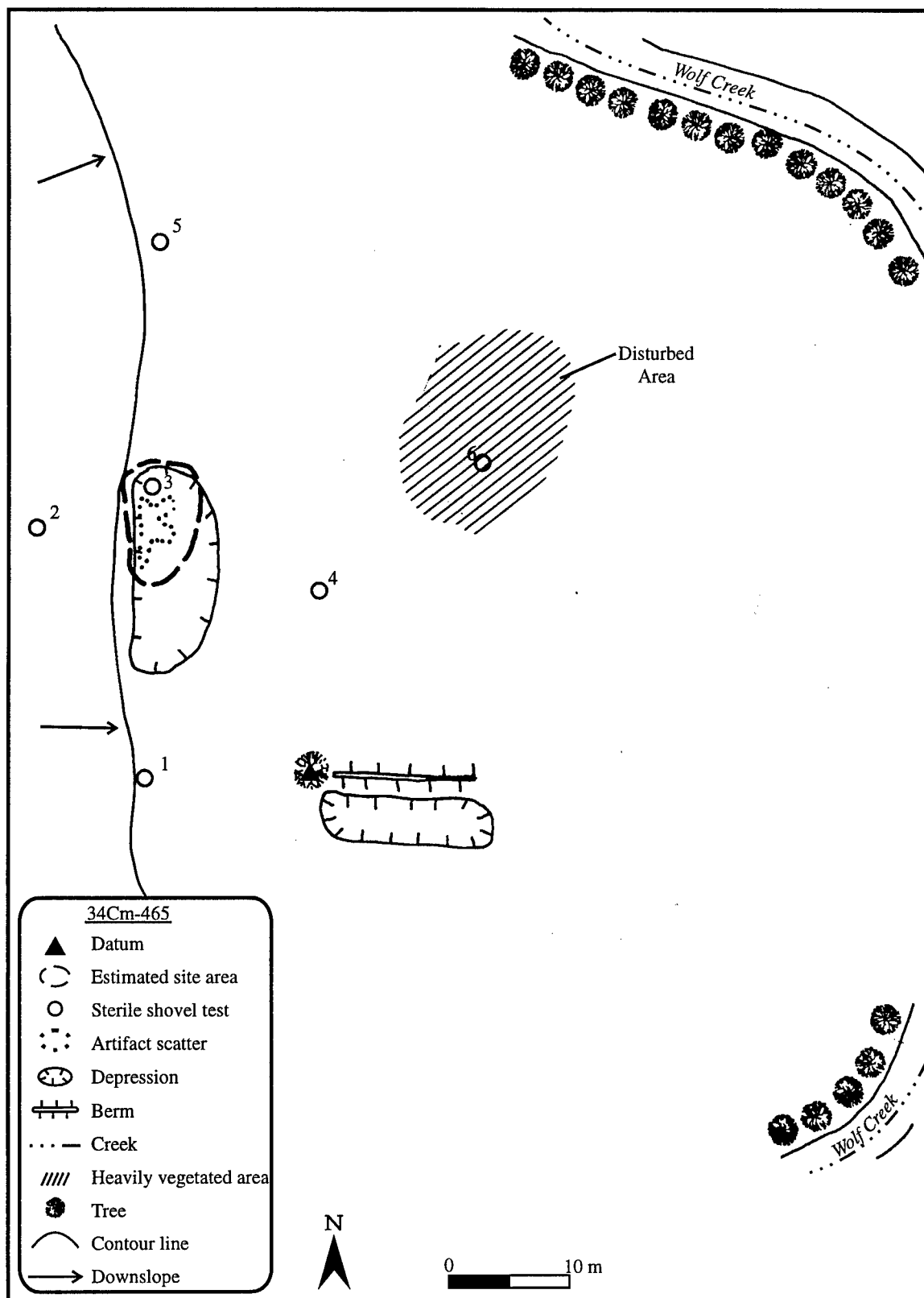


Figure 71. Plan map of site 34Cm-465 (92-97).

Prehistoric Artifacts

The artifact assemblage from this site consists of a biface, a hammerstone, a core, and four pieces of lithic debris. All of this material was collected from the surface of this site; no additional material was observed.

The biface collected from this site is a teardrop-shaped Ogallala quartzite preform that measures 6.5 cm x 4.0 cm x 1.9 cm and weighs 39.3 g. One side of this preform has had a number of smaller flakes removed during the initiation of the bifacial thinning process, but the opposing side is still crudely shaped. A series of step fractures along the base of the biface possibly indicates a failed attempt to remove thinning flakes from this side of the preform. The lithic material is fine-grained with a satin luster and reddish tint, possibly indicating heat-treatment.

The hammerstone is a coarse-grained quartzite cobble with evidence of battering at one end. This specimen measures 7.1 cm x 4.1 cm x 3.7 cm and weighs 163.4 g. The core is a roughly discoidal-shaped piece of Ogallala quartzite with large flakes removed from both sides. The measurements of this artifact are 7.3 cm x 6.9 cm x 2.4 cm; the weight is 146.4 g. A slight reddish coloration of the matrix may indicate heat-treatment, but the medium texture and dull luster indicate otherwise.

The remaining artifacts consist of one secondary flake, two tertiary flakes, and one flake fragment. The secondary flake is light gray Edwards chert with water polished cortex. The other material consists of two quartzite flakes and one piece of unidentified chert. All this material falls into the size range of 1 to 2 cm.

Summary

While this site exhibits only a very small amount of surface material and no subsurface material, its position on the floodplain of East Branch Wolf Creek may indicate the presence of subsurface material buried beyond the depth obtainable by shovel testing. Mechanical testing of this site is recommended to evaluate fully its potential for inclusion in the NRHP.

34Cm-284 (92-98)

This is a multicomponent site located on the upland ridge bordering the west edge of the East Branch Wolf Creek floodplain. Soil at the site is mapped as Vernon soils, while to the north and east the soil is mapped as Port-Slickspots complex. The site is at an elevation of 351 m (1,150 ft) amsl. Vegetation observed in the area of the site consisted of oak, elm, and pecan along the creek with mesquite (datum tree), sparse mixed grasses, thistles, and wildflowers on the uplands.

This site was previously recorded as site 34Cm-284 and was described as a scatter of historic debris 75 m in diameter, which was partially destroyed by a 40-m-wide borrow pit. When the current survey relocated this site, it was found that the borrow pit had been expanded to 48 m by 155 m, resulting in the total destruction of the site. Only a low density scatter of historic artifacts was observed, consisting of about 30 items spread out over a 5,800-m² area (Figure 72). The historic material observed is similar to the material reported by the initial survey, a primarily early twentieth century assemblage.

The original recorders of this site speculated that this site may have been associated with Camp Doniphan, a World War I training facility located north of this site. However, this portion of the Fort Sill Military

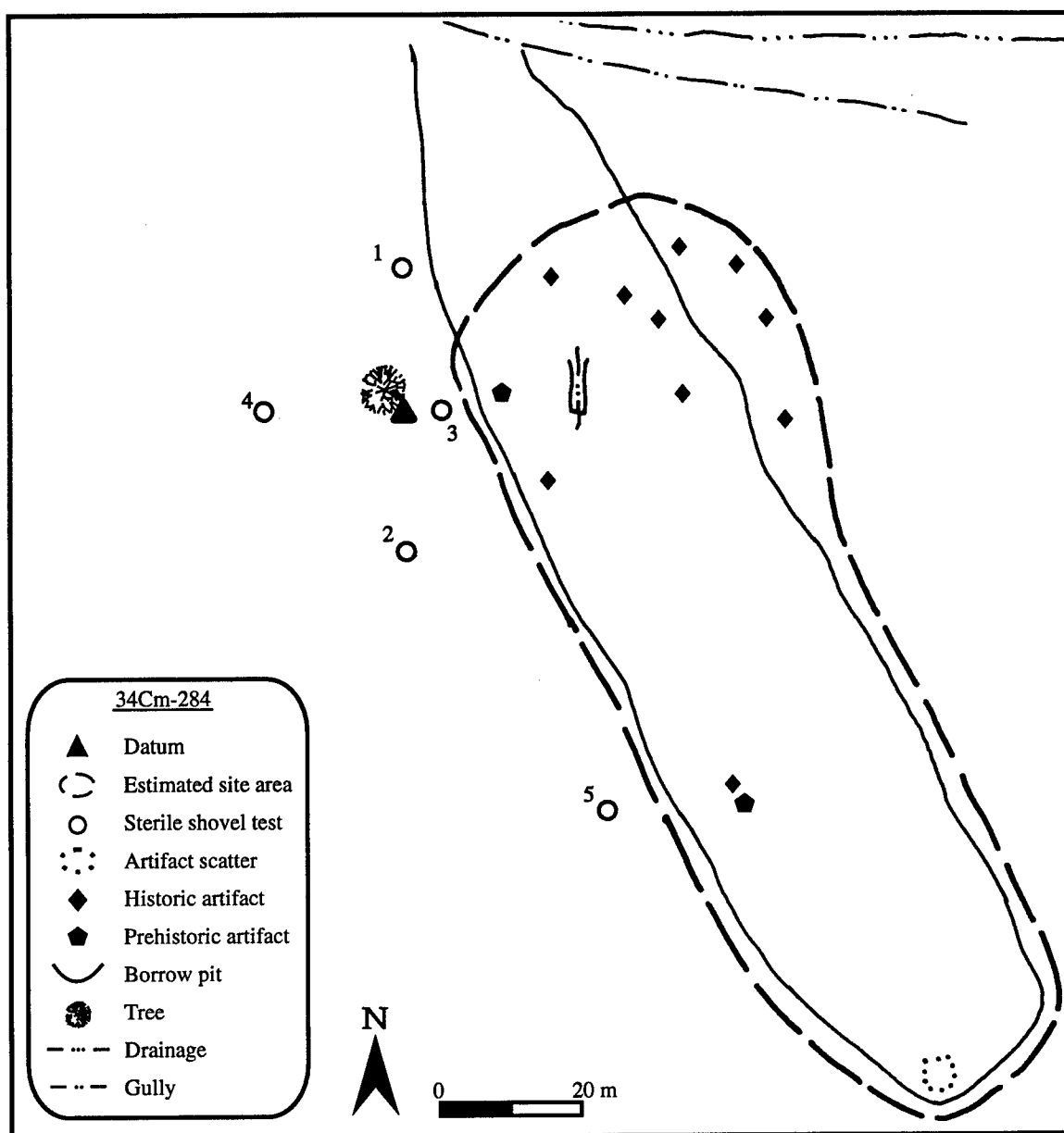


Figure 72. Plan map of 34Cm-284 (92-98).

Reservation was not acquired until after 1940, making it likely that the historic artifacts observed at this site are associated with civilian activities rather than military training.

In addition to the historic material originally recorded for this site, the current survey located an Archaic dart point base and a quartzite flake on the ground surface inside the borrow pit. Four shovel tests were placed outside the pit near where the point was found. An additional test was placed near the location of the flake. All five tests were negative, only revealing that the surface sediments outside of the pit have been severely eroded.

Prehistoric Artifacts

Only two prehistoric artifacts were observed and collected from this site. One is the basal portion of a dart point of gray (5YR 5/2) Ogallala quartzite (Figure 73). This specimen is a point base with nearly parallel sides and no basal grinding. It has been tentatively dated to the Late Archaic. This artifact measures 1.8 cm across the remnants of its shoulders and 1.4 cm from the base to the fracture, is .5 cm thick, and weighs 2.1 g. The second item is a secondary flake of heat-treated Ogallala quartzite that falls within the size range of 3 to 4 cm.

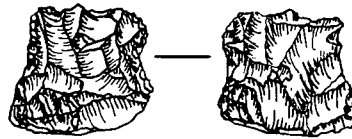


Figure 73. Diagnostic lithic artifact recovered from 34Cm-284 during the 1992 survey: Ogallala quartzite dart point fragment. (Scale 1:1)

Historic Artifacts

One manganese solarized glass bottle stopper (1880-1920) was collected from the surface of this site.

Summary

This site has been totally destroyed by borrowing activity. This site is a prime example of the destructive effects of mechanical soil removal on archeological sites. No additional work is recommended nor is this site recommended for the NRHP.

34Cm-466 (92-99)

The site is a low density surface scatter of lithic debris located at the top of a finger ridge west of East Branch Wolf Creek, at the edge of the dissected uplands west of the creek. This ridge has been formed by two small, upland drainages that are downcutting on the north and south sides of the site. The soil in the site area is mapped as Port-Slickspots complex on the east and Vernon soils in the uplands on the west; however, observations in this area indicate that severe erosion has created a granite cobbly land type soil, with very little surface sediments remaining. Site elevation is 354 m (1,160 ft) amsl. Vegetation observed in the area of the site consisted of mixed grasses and widely spaced mesquite. Oak, pecan, greenbrier, poison ivy, and sumac can be found along East Branch Wolf Creek.

Almost all of the artifacts at this site were observed on the top of the ridge, with only a few flakes observed within the two track road at the base of the ridge. The artifacts are apparently eroding out of this slope and are being moved downslope to the level floodplain of East Branch Wolf Creek. No artifacts were observed on the north and south slopes of the finger ridge, although unmodified cobbles were observed on the surface immediately south of the site.

Nine shovel tests were dug around and on top of the ridge; all were sterile. Shovel tests were not dug southeast of Shovel Test 8 or north of Shovel Test 9 due to lack of soil. These downslope areas consist of exposed granite cobble surfaces without soil. Site area is estimated at 11,200 m² (Figure 74).

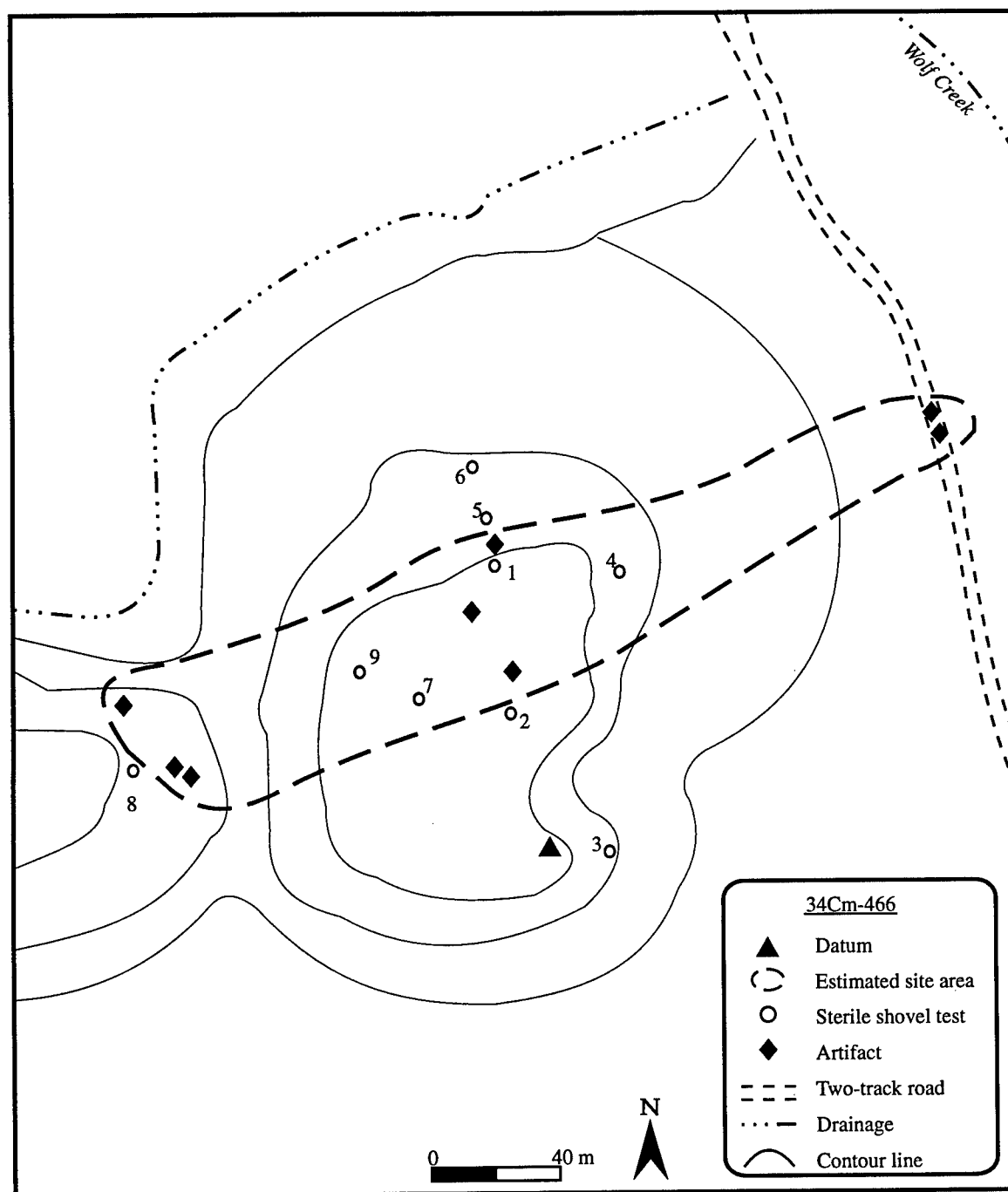


Figure 74. Plan map of site 34Cm-466 (92-99).

Prehistoric Artifacts

The lithic assemblage from this site is composed of one core, one primary flake, one tertiary flake, and nine angular fragments. No additional cultural material was observed at this site, but numerous quartz and quartzite cobbles were present on the surface, particularly south of the datum.

The single primary flake recovered is an Ogallala quartzite specimen with smooth, weathered cortex typical of the quartzite cobbles in the area. This flake is greater than 5 cm in size. The tertiary flake is a small pressure flake of fine-grained, pink (7.5YR 7/3) chert with a semi-gloss luster and translucency of slightly more than 2 mm; the flake dimensions are between 1 and 2 cm in size.

The core and two of the angular fragments are of a dark gray, medium-grained, dense metaquartzite. The core, roughly triangular in shape, has had flakes removed from two edges on one face and from one edge from the reverse face. The core is greater than 5 cm in length; one quartzite fragment is between 2 and 3 cm, and the other is between 4 and 5 cm.

The remaining angular fragments include four pieces of Ogallala quartzite, one piece of Alibates chert, one piece of brick red chert, and one piece of quartz. The size ranges for these fragments are: one between 2 and 3 cm; three between 3 and 4 cm; and three between 4 and 5 cm in length.

Summary

This site has only a low density of artifacts, no diagnostic artifacts or tools, and no subsurface material. Disturbance to the site has been extensive, primarily from the erosion along the ridge slopes, but also from military vehicles transversing the site area. No further work is recommended, and the site is not recommended for inclusion in the NRHP.

34Cm-310 (92-100)

This site was previously recorded as site 34Cm-310, an extensive lithic scatter located along the top of an upland ridge west of East Branch Wolf Creek. Soil on this ridge is mapped as Vernon soils, though erosion has reduced the surface layers to a point where they more closely resemble granite cobbly land. The elevation of this ridge is 366 m (1,200 ft) amsl, the highest elevation in the immediate vicinity. Vegetation consists of sparse grasses and wildflowers.

When originally recorded, the site consisted of a 10,000-m² lithic scatter containing 23 pieces of lithic debris and one scraper. Ogallala quartzite was reported as the dominant raw material type. The current survey located a scatter of lithic artifacts covering an area of 20,000 m² (Figure 75). Twenty-five pieces of lithic debris and one biface fragment were collected, with Ogallala quartzite again dominating the assemblage. Eleven shovel tests were excavated but no subsurface material was observed. The deepest level was 20 cm bs. No shovel tests were excavated on the western slope of the ridge due to the lack of soil.

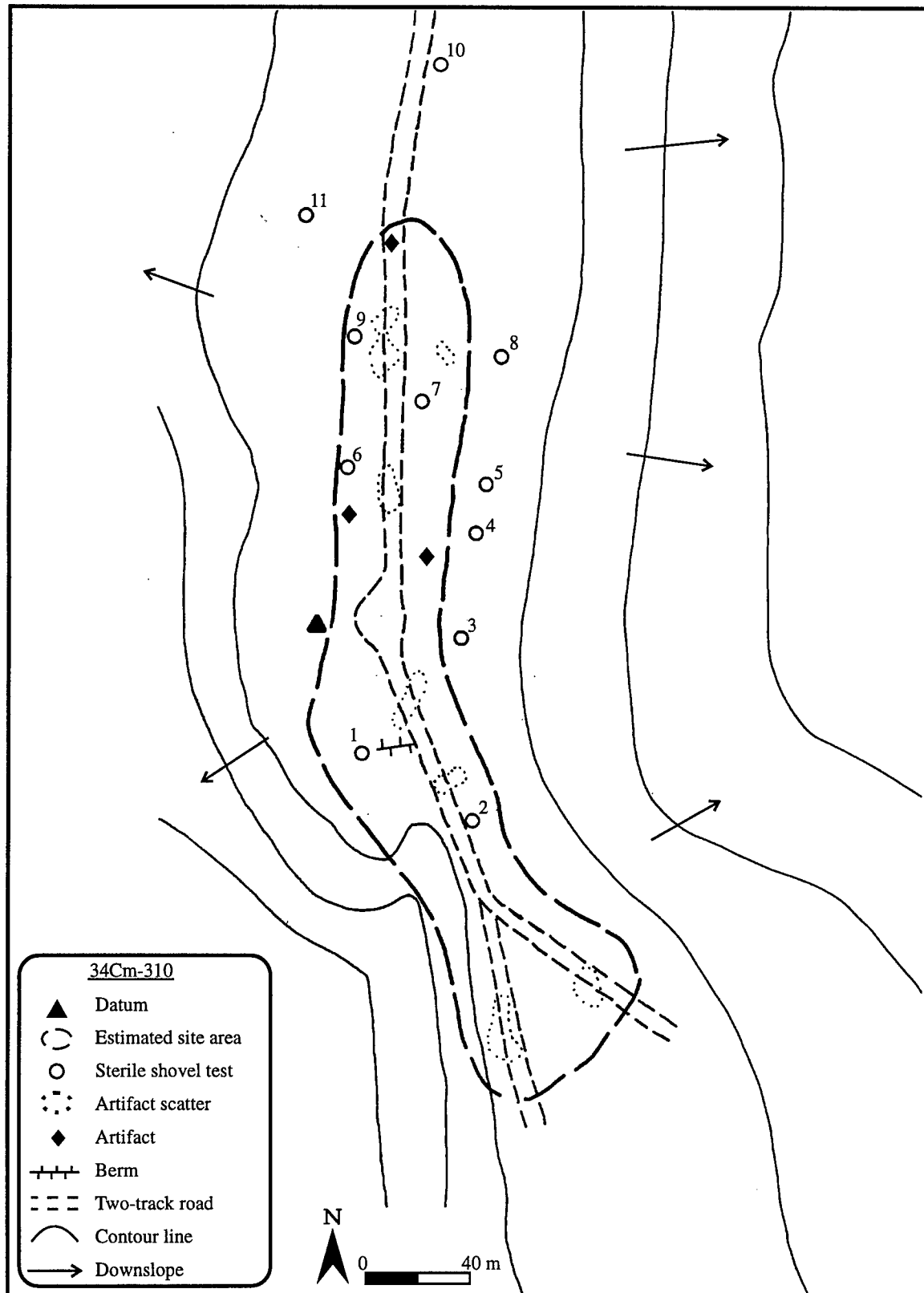


Figure 75. Plan map of site 34Cm-310 (92-100).

The site area is littered with MRE wrappers, glass fragments, K-ration cans, razor blade packages, and shotgun shells. Several unimproved dirt roads cross the site area, increasing the erosion that already occurs naturally in this area. A large military marker has also been placed in the site area and a small berm of soil indicates that some alteration of the land surface has occurred.

Prehistoric Artifacts

The artifact assemblage from this site consists of 26 pieces of lithic debris. Two primary flakes, one tertiary flake, three flake fragments, one core, one tested cobble, and 18 angular fragments were collected from the surface of this site. Raw materials include two pieces of Alibates chert, five pieces of other chert, 15 pieces of Ogallala quartzite, three pieces of other quartzite, and one piece of basalt. Eight items ranged in length from 1 cm to 2 cm, nine ranged from 2 cm to 3 cm, five ranged from 3 cm to 4 cm, one between 4 cm and 5 cm, and three were over 5 cm. No other cultural material was observed on the ground surface or in any shovel tests.

Summary

Restriction of traffic in the site area was originally recommended in order to preserve this site. Evidence indicates that this recommendation was not followed and that this area is still being subjected to military traffic and other training activities. This has resulted in the continuing deterioration of this site. Since preservation of this site does not appear to be a viable alternative, further testing prior to full data recovery is recommended for this site.

34Cm-471 (92-105)

This site is located on a knoll between two intermittent drainages west of East Branch Wolf Creek. The soils are mapped as Vernon soils; site elevation is 369 m (1,210 ft) amsl. Vegetation consists of mixed grasses.

A core and 22 flakes were observed on the ground as the survey crew was finishing the last survey transect at the end of the work day. The site was marked and was scheduled to be recorded the following morning; however, the survey crew next discovered unexploded rifle-launched and rocket-launched grenades on the ground surface a short distance from this site. The area was examined by the Army's Explosives, Ordnance, Demolition (EOD) personnel, who determined that the area was unsafe. As a result, further survey efforts in this area were suspended. Therefore, no site map, shovel tests, area estimates, nor photographs exist for this site.

34Cm-472 (92-107)

This site consists of a historic farmstead located at the top of a rise in the southwest corner of the intersection of Mow-Way Road and McKenzie Hill Road. The soil in this area is mapped as Foard and Tillman soils; site elevation is 372 m (1,220 ft) amsl. All of the features observed at this site are located within a black locust thicket, while the artifact scatter extends outside of this thicket into an area of mixed grasses.

This site consists of a 17-x-10-m house foundation (Feature 1), a 1-m diameter well 9 m south of the (Feature 2), and a shallow depression southwest of the foundation (Feature 3). The house foundation, constructed of concrete-and-granite cobbles, is approximately 70 percent complete.

There is a light scatter of historic artifacts in the house area, but no concentrations were evident. Twelve shovel tests were excavated. Six yielded crockery, whiteware, glass, lamp glass, and wire nails. Charcoal was evident in small amounts in Shovel Tests 4 and 6. The positive shovel tests were all located in the eastern portion of the site area. Only a low density scatter of surface artifacts was observed in the western portion of the site. Site area is estimated at 2,000 m² (Figure 76).

Realignment of Mow-Way Road, including a deep roadcut through the rise, has disturbed a major portion of the site, resulting in a large scatter of historic artifacts spread out over a 3,000+ m² area along the road's shoulder. This scatter has not been included within the site area since it is entirely contained within a highly disturbed area, is concentrated approximately 50 m south of the house location, and can not be directly associated with the house.

Historic Artifacts

Historic material was recovered from the surface and six shovel tests. Diagnostic ceramic material recovered from the shovel tests consisted of a bristol and cobalt blue exterior/ bristol interior (1890-1915) stoneware fragment and one white-whiteware fragment (1890-1990). Other material recovered from shovel tests included wire nails (1880-1990), fragments of a crimped tin can top (1902-1990), a .22 caliber brass cartridge (Utah 1890-1990), and three window pane fragments. Surface material collected included a zinc canning seal (1865-1915), with an intact Boyd's Genuine opaque liner (1900-1950), and a machine-made bottle from the Kinghorn Bottle Company (1910-1920; Figure 77). A MBD of 1893 is estimated for the site from the recovered diagnostic historic material.

Summary

Even though an undetermined portion of this site has been entirely destroyed, it retains intact features and a moderate density of subsurface material. Further testing as well as additional archival research is recommended to evaluate fully this site's potential for inclusion in the NRHP.

34Cm-475 (92-110)

This site is located south of McKenzie Hill on a gently sloping, south-facing rise. The headwaters of two small intermittent drainages are located on the east and west. The western drainage has been dammed to form a large stock pond 500 m south of the site. Two unimproved dirt roads cross the eastern and western margins of the site. The soil in this area is mapped as Foard-Slickspots complex; site elevation is 372 m (1,220 ft) amsl. Mixed grasses, mesquite, and a few oak trees comprise the vegetation for this area.

The site was initially recognized from a small amount of lithic material observed in the western dirt road that included the base of a dart point. Further investigation located a second lithic scatter in the eastern dirt road plus a scatter of cultural material between the roads. The lithic scatter is primarily concentrated in the northern portion of the site area, but material was observed south along the roads until they join at the southern site limit. Besides the point base, a second dart point fragment, a biface fragment, a utilized

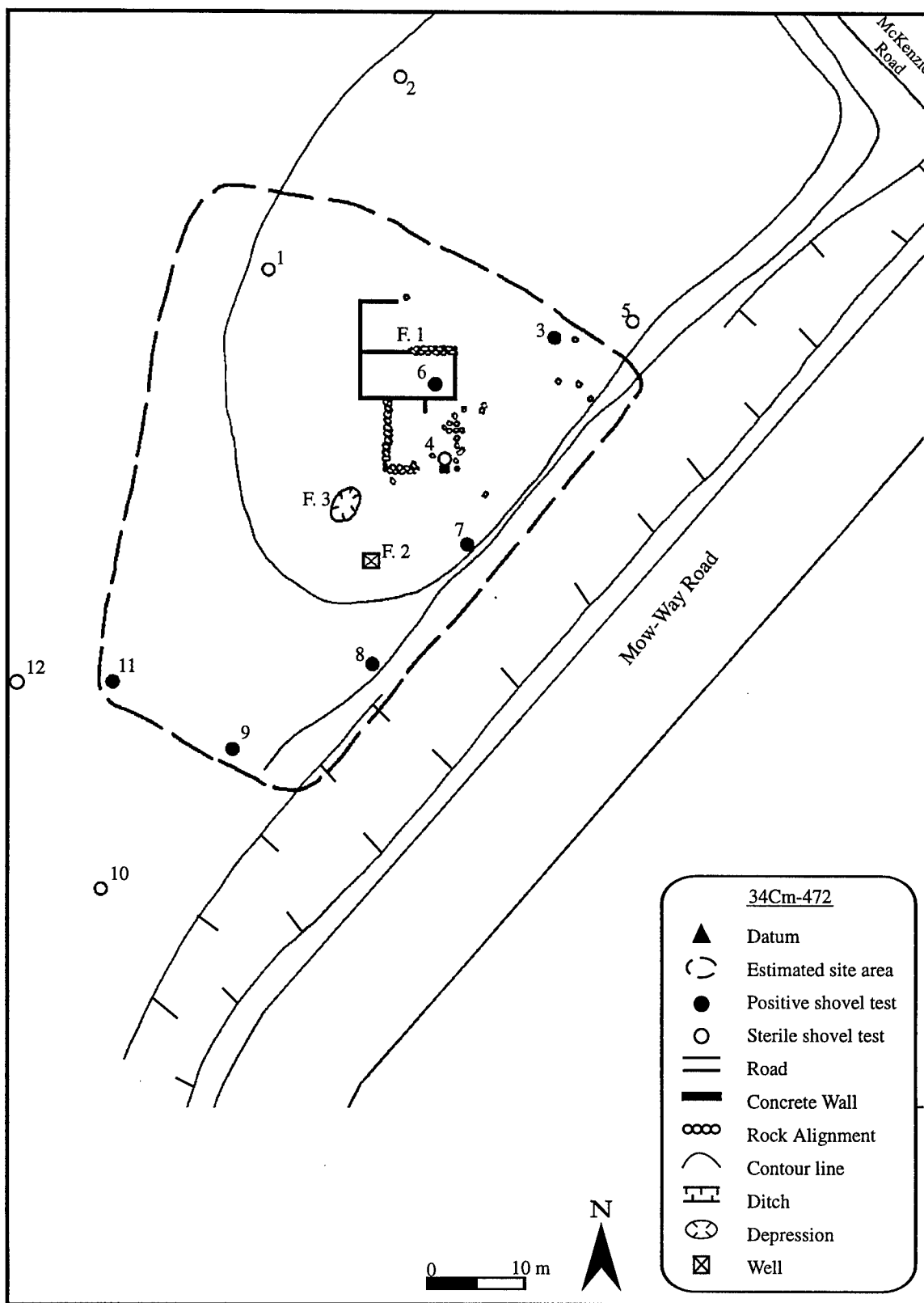


Figure 76. Plan map of 34Cm-472 (92-107).

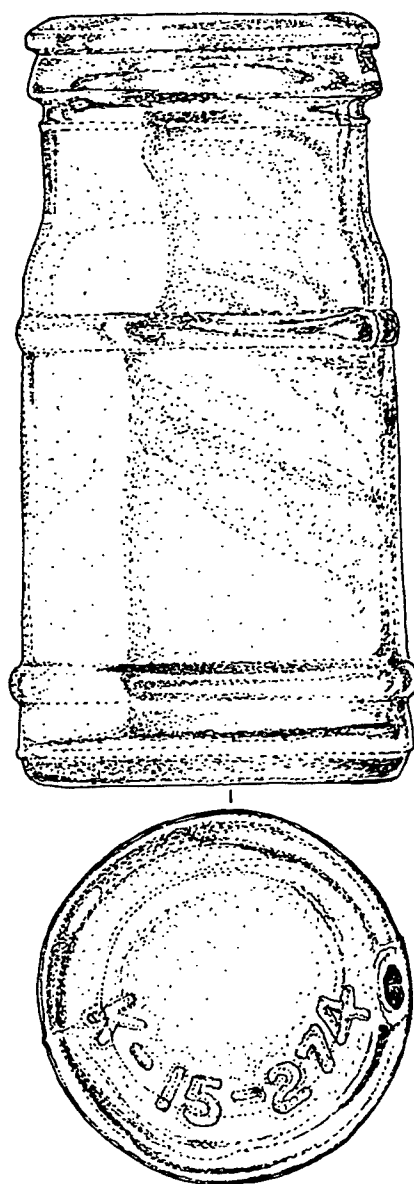


Figure 77. Historic artifact from 34Cm-472: clear machine made bottle from the Kinghorn Bottle Company. (Scale 1:1)

flake, and an end scraper were collected. The remainder of the 31 items collected from the surface consisted of lithic debris.

Of the 33 shovel tests excavated at this site, nine test units produced a total of 25 items. All the positive tests are located on the eastern side of the site. Two positive shovel tests are located west of the eastern road, while the other seven are east of this road and extend downslope to the edge of the eastern drainage.

All of the material recovered from the shovel tests was lithic debris, with the exception of one utilized flake and one biface fragment.

The two unimproved dirt roads that cross the east and west edges of the site have not yet caused significant damage to the site. This may change in the near future, since this area has recently been designated as a close-in training area. A significant increase in training activity involving tracked vehicles is expected in this area. The site area is approximately 57,500 m² (Figure 78).

Prehistoric Artifacts

Surface

The base of a lanceolate point or stem of a large dart point was collected from the surface of this site (Figure 79a). Measuring 1.5 cm in length and 1.8 cm in width at the base, this point fragment is .8 cm thick and weighs 2.3 g. The base and one lateral edge exhibit grinding, but the other lateral edge has been left unsmoothed. The material from which the specimen was made has been identified by L. Banks (personal communication, 1993) as Alibates (N8) chert. While this piece is too fragmentary for confident typological identification, the basal shape is suggestive of an Agate Basin point.

The second projectile point fragment represents the base of a crudely made dart point (Figure 79b). Made from Edwards (10YR 8/2) chert, this artifact exhibits a traverse hinge fracture just above the notches and the elimination of one tang. The hinge fracture does not appear to be the result of a manufacturing error, having been caused instead by a high angle impact to the midsection of the blade. The dimensions of this artifact are 1.6 cm x 1.5 cm x .6 cm, and its weight is 1.5 g.

The medial fragment of an Ogallala quartzite dart point or knife exhibits excellent workmanship for this tenacious material. Well-flaked, thin, and with a symmetrical cross section, this specimen measures 2.2 cm x 2.2 cm x .6 cm and weighs 2.85 g.

The last tool collected from the surface of this site is an unusual scraper with a V-shaped bit. Both working edges are steeply chipped and exhibit moderately heavy use wear. The tool's margins opposite the bit are irregular and may represent the fractured remains of a hafting element. These edges also have had a number of small flakes removed, plus a small, graver-like projection was produced at one side. These elements may represent the modification of a broken scraper into an expediency tool.

Lithic debris from this site includes a primary flake of Tecovas quartzite measuring 2.5 cm x 2.4 cm x .7 cm and weighing 3.0 g; a secondary flake of Edwards chert measuring 2.6 cm x 1.1 cm x .4 cm and weighing 1.1 g; and a secondary flake of Tecovas-like chalcedony measuring 1.4 cm x 1.2 cm x .3 cm and weighing .6 g. Three tertiary flakes were also collected, including a bifacial thinning flake of Edwards chert measuring 1.8 cm x 1.5 cm x .2 cm and weighing .45 g, and two small percussion flakes of Tecovas-like chalcedony measuring 1.3 cm x .8 cm x .4 cm and 1.5 cm x 1.0 cm x .3 cm, both with weights of .4 g.

Flake fragments collected from the surface consist of two pieces of Edwards chert, two pieces of other chert, three pieces of Ogallala quartzite, one piece of silicified sandstone, and two pieces of rhyolite. The size ranges for this debris include: less than 1 cm in size (n=1), between 1 to 2 cm (n=7), and between

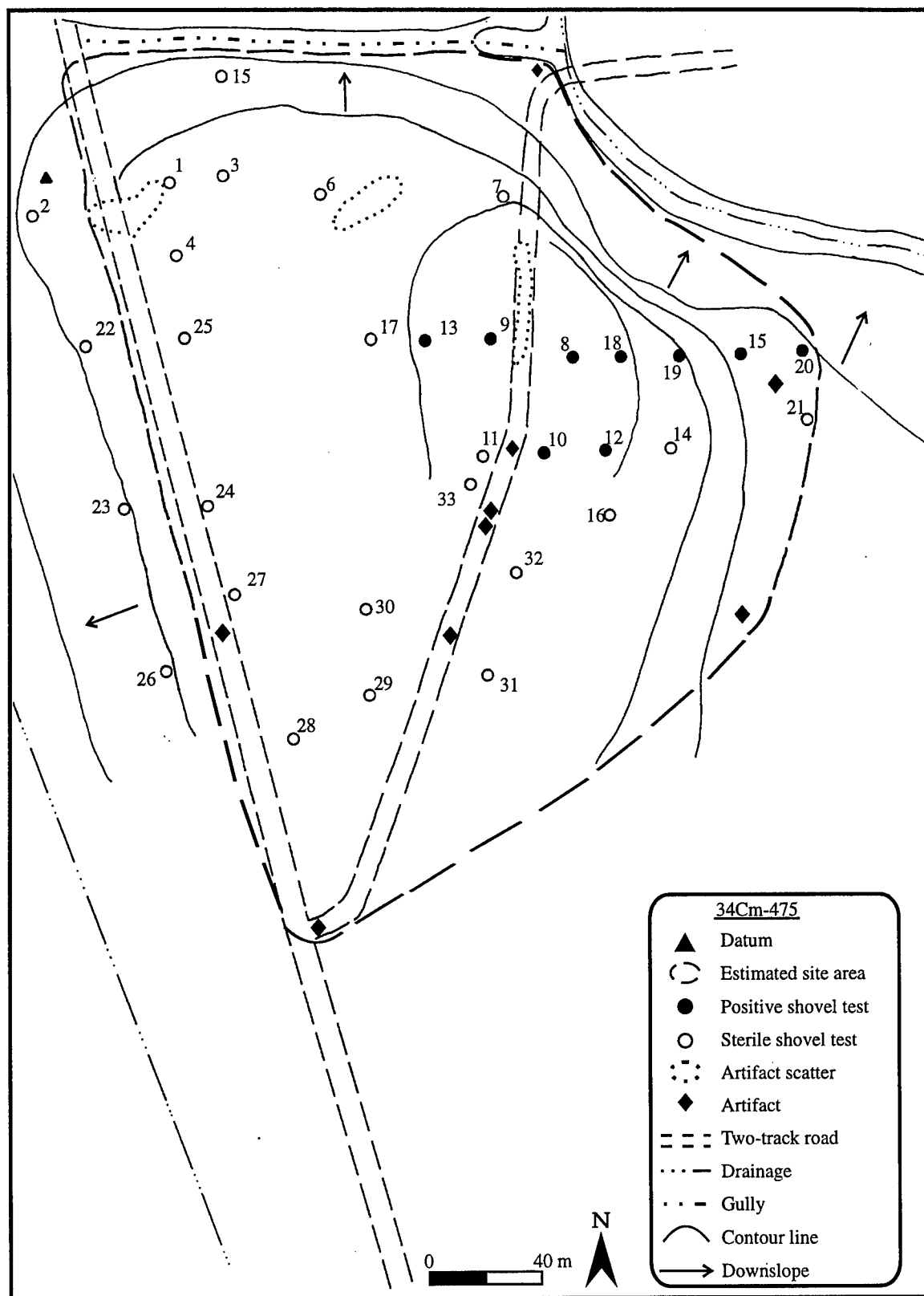


Figure 78. Plan map of site 34Cm-475 (92-110).

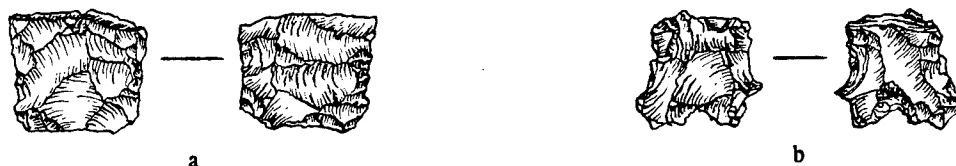


Figure 79. Diagnostic lithic artifacts recovered from 34Cm-475 during the 1992 survey: (a) Alibates dart point fragment; (b) Edwards chert projectile point fragment. (Scale 1:1)

2 to 3 cm (n=2). Angular fragments include two large pieces of rhyolite, one large piece of basalt, three pieces of Ogallala quartzite, one of Alibates chert, one piece of Tecovas-like chalcedony, and three pieces of other chert. Sizes range between 1 and 2 cm (n=2), between 2 and 3 cm (n=2), between 3 to 4 cm (n=4), between 4 and 5 cm (n=1), and greater than 5 cm (n=2).

Shovel Test 8, Level 1 (0 to 20 cm bs)

The first level of this test unit yielded one tertiary flake, four flake fragments, and one angular fragment. Materials consist of one piece of Alibates chert, one piece of Tecovas-like chalcedony, one piece of Edwards chert, two pieces of Edwards quartzite, and one piece of other quartzite. This material all falls between 1 and 2 cm in size.

Shovel Test 8, Level 2 (20 to 40 cm bs)

An Ogallala quartzite biface fragment, an angular fragment of very dark brown, very fine-textured chert, and an angular fragment of Alibates chert were recovered from the second level of this test unit. The biface exhibits both a fracture and battering along an edge and a medial traverse fracture. This piece appears to have been abandoned before completion. The fragment measures 2.9 cm x 1.4 cm x .8 cm and weighs 3.4 g. Both angular fragments are between 2 and 3 cm in length.

Shovel Test 9, Level 1 (0 to 20 cm bs)

A single flake fragment of Ogallala quartzite was recovered from the first level of this shovel test. It is 1.6 cm long and weighs 1.0 g.

Shovel Test 9, Level 2 (20 to 40 cm bs)

An Alibates chert flake fragment measuring .9 cm x .7 cm x .3 cm and weighing .1 g was recovered from the second level of Shovel Test 9.

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Shovel Test 10, Level 1 (0 to 15 cm bs)

A chert flake fragment measuring .6 cm in length and an Ogallala quartzite flake fragment measuring 1.2 cm in length were the only two artifacts recovered from this test unit.

Shovel Test 12, Level 1 (0 to 20 cm bs)

This test unit yielded one chert flake fragment, one Tecovas-like chalcedony flake fragment, one silicified sandstone flake fragment, and one chert angular fragment. All four items range between 1 and 2 cm in length.

Shovel Test 13, Level 1 (0 to 20 cm bs)

A single, very dark brown, very fine-grained tertiary chert flake was recovered from this test unit. The distal end of this flake has been snapped off, leaving a remnant measuring less than .6 cm long.

Shovel Test 15, Level 1 (0 to 20 cm bs)

A single rough piece of chert was recovered from the first level of this unit. This piece is less than 1 cm in length and has not been culturally modified.

Shovel Test 15, Level 2 (20 to 32 cm bs)

A bifacial thinning flake of Tecovas-like chalcedony was recovered from the second level of this test unit. This piece measures 1.2 cm x .9 cm x .2 cm and weighs .3 g.

Shovel Test 18, Level 1 (0 to 20 cm bs)

An Alibates chert fragment, a very small chert flake fragment, a rhyolite flake fragment, and an Edwards chert angular fragment were recovered from this test unit. The Edwards chert fragment has rough cortex on one surface, is battered along one edge, measures 2.0 cm x 1.2 cm x .9 cm, and weighs 2.1 g. The flake fragments are all less than 1 cm in size.

Shovel Test 19, Level 1 (0 to 20 cm bs)

An Ogallala quartzite flake fragment and an angular fragment of either chert cortex or sedimentary rock were recovered from this shovel test unit. Both pieces are between 1 and 2 cm in length.

Shovel Test 20, Level 1 (0 to 20 cm bs)

A single Ogallala quartzite flake fragment, 1.1 cm in length, was recovered from this test unit.

Summary

This site is the only recorded upland site known to contain diagnostic material, tools, and subsurface archeological deposits. It has the potential to shed light on the prehistoric utilization of the Wichita Mountains area, during the Archaic period in particular. Further testing as well as additional archival research is recommended to evaluate fully this site's potential for inclusion in the NRHP. Until this assessment can be completed, it is recommended that training activities in this area be curtailed unless steps are taken to preserve this site.

34Cm-476 (92-111)

This site is a low density lithic scatter eroding out of a small knoll on the floodplain of East Branch Wolf Creek. The site is located at the edge of a small wetland by created by East Branch Wolf Creek and the leaking Lawton aqueduct. Soil in this area is mapped as Port-Slickspots complex; site elevation is mapped as 352 m (1,155 ft) amsl. Vegetation observed in the area of the site consisted of mesquite, juniper, willow, cottonwood, ash, elm, pecan, Johnson grass, long stem bunch grass, and black-eyed Susan.

Twenty-two flakes were observed at the site, mostly primary and secondary reduction flakes, located in two concentrations. Nearly all the raw material is Ogallala quartzite. Five shovel tests were excavated across the site area, with only one yielding a single artifact. Site area is estimated at 600 m² (Figure 80).

The construction of the Lawton aqueduct, which crosses the southern edge of the site area, may have impacted the site. On the other hand, the construction of this aqueduct may have brought this material to the surface from a buried archeological deposit. In either case, the site context appears to be intact.

Prehistoric Artifacts

The artifact assemblage from this site includes 17 pieces of lithic debris collected from the surface of this site and one flake fragment yielded by Shovel Test 1.

Surface

Twelve Ogallala quartzite flake fragments and one coarse chert flake fragment were collected from the surface of this site. Four fragments range in size from 1 to 2 cm, five measure between 2 and 3 cm, three measure between 3 and 4 cm, and one measures between 4 and 5 cm. Four angular fragments were collected, one between 1 and 2 cm in length, one between 3 and 4 cm, one between 4 and 5 cm, and one fragment exceeding 5 cm in length.

Shovel Test 1, Level 1 (0 to 20 cm bs)

A single flake fragment was collected from the first level of this shovel test. This specimen falls into the 2 to 3 cm size range.

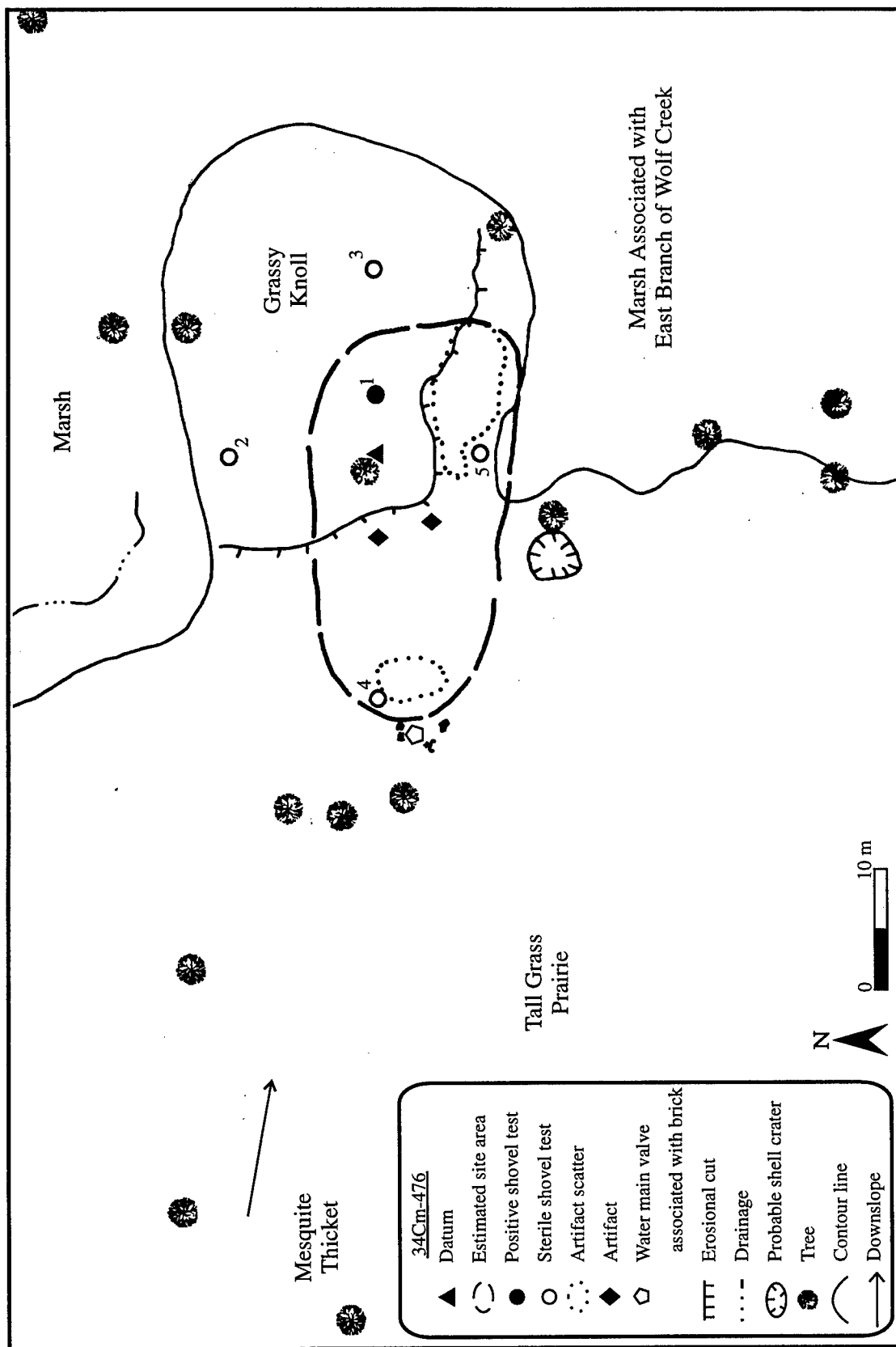


Figure 80. Plan map of site 34Cm-476 (92-111).

Summary

This site location on the East Branch Wolf Creek floodplain indicates the potential for deeply buried archeological deposits. Further testing, including mechanical testing, is recommended to evaluate fully this site's potential for inclusion in the NRHP.

34Cm-477 (92-112)

Site 34Cm-477 is a moderate density lithic scatter located on the southwest-facing slope of a dissected upland immediately west of the cantonment area. Soil in this area is mapped as Vernon soils; elevation of the site is 366 m (1,200 ft) amsl. Vegetation observed in the area of the site consisted of cottonwood, juniper, oak, pecan, short stem bunch grass, goldenrod, and black-eyed Susan.

This site consists of approximately 30 pieces of lithic debris and one tested quartzite cobble. All artifacts are of quartzite. Five shovel tests were excavated at this site, but no cultural material was recovered. Site area is estimated at 7,000 m² (Figure 81).

The site area is extensively eroded and has only a sparse vegetational cover. The area east of the site boundary is less eroded, but no cultural material was observed on the ground surface or in the single shovel test excavated in this area.

Prehistoric Artifacts

The artifact assemblage collected from the surface of this site is composed of six pieces of Ogallala quartzite debris; additional Ogallala quartzite debris was observed on the ground surface but not collected. The material collected from this site includes one tertiary flake with a medial fracture and three flake fragments. The size ranges for this material are between 2 and 3 cm (n=3) and between 4 and 5 cm (n=1).

A fragment of a core was also collected. This item is a fairly small piece of Ogallala quartzite, between 3 and 4 cm in length, with cortex remaining on one surface. The other surfaces of this core exhibit multiple flake scars. The angular fragment collected from this site is a fractured cobble of questionable cultural origin. This item exceeds 5 cm in length.

Summary

This site contains no diagnostic artifacts, no tools, and no subsurface material. No further testing is recommended at this site, and it is not recommended for inclusion in the NRHP.

34Cm-478 (92-113)

Site 34Cm-478 is an extensive, low density lithic scatter located along the peak of an eroded upland hill (Ted Hill). The peak is broad and level and is severely eroded; soil in this area is mapped as Vernon soils.

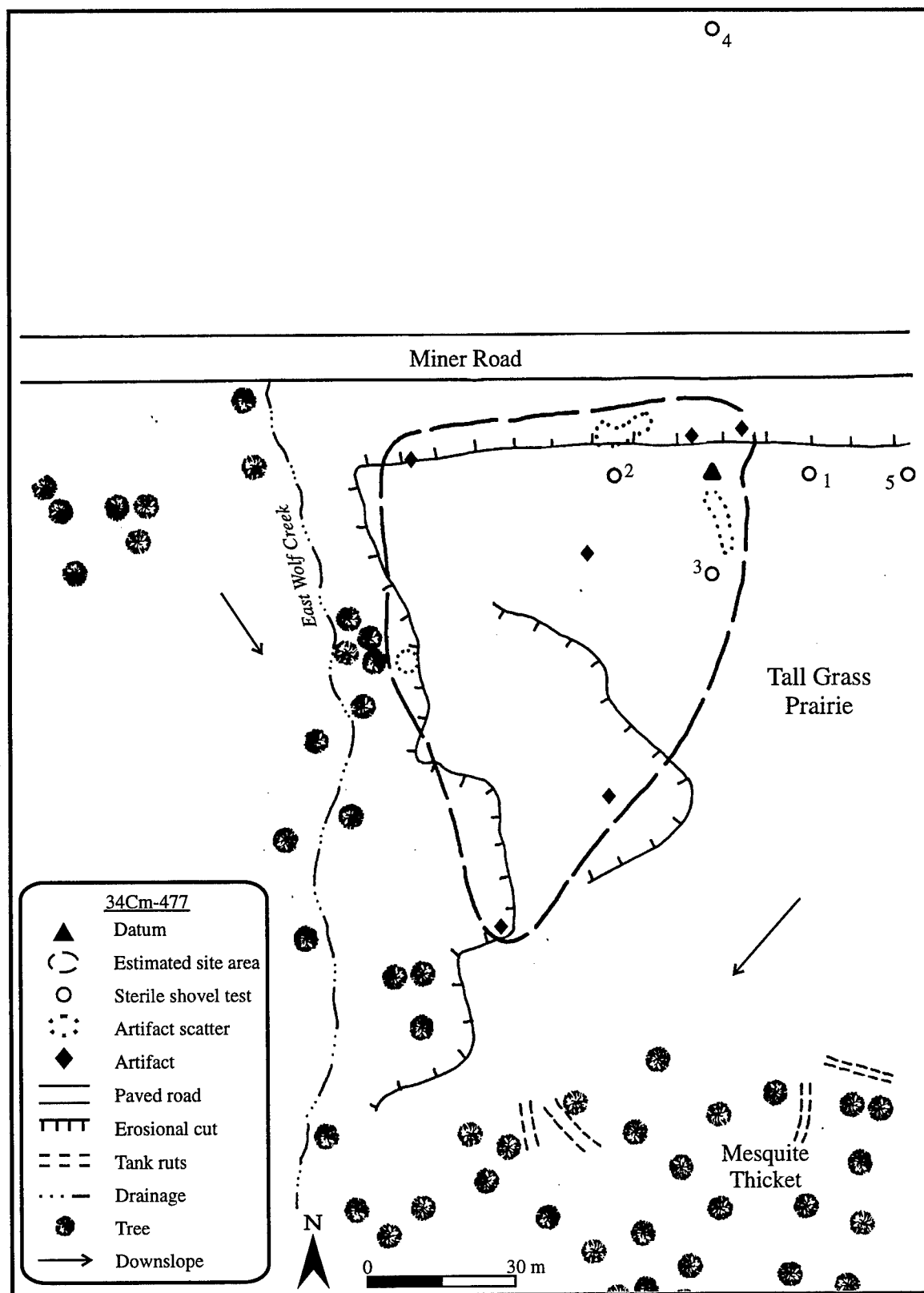


Figure 81. Plan map of site 34Cm-477 (92-112).

Site elevation is 366 m (1,200 ft) amsl. Vegetation observed in the area of the site consisted of sunflower, black-eyed Susan, goldenrod, long stem bunch grass, Johnson grass, and prickly pear cactus.

The site consists of a scatter of lithic debris, primarily of quartzite. There is a slight concentration of material in the central portion of the site. Five shovel tests were excavated, and all five failed to yield cultural material. The maximum depth of the A-horizon was observed to be 19 cm bs. Site area is estimated at 8,500 m² (Figure 82).

This site is within an area that has been extensively disturbed by military vehicular traffic and borrow activities. Approximately 1 m of surface sediments has been removed from the northern portion of Ted Hill north of the site area, and the entire crown of the hill east of Ted Hill has been striped to the C-horizon. Since originally being recorded, the site itself has been graded for road construction.

Prehistoric Artifacts

Lithic debris of a variety of materials was collected from the surface of this site; in addition, Ogallala quartzite debris was observed on the ground surface but not collected. Raw materials observed at the site include Ogallala quartzite, metaquartzite, weakly silicified sandstone, well silicified fine sandstone, Alibates chert, and unidentified chert.

Included within the collected assemblage is a tested cobble and conjoining primary flake of Ogallala quartzite. These pieces exhibit remnant bedding, which is interesting from a petrological viewpoint but probably discouraged the aboriginal knapper from using this piece. The cobble is 10.2 cm in length, with the conjoining flake measuring between 3 and 4 cm long.

Six other flakes were collected from this site. A second primary flake was from Ogallala quartzite and exhibits a crushed platform; this flake measures between 3 and 4 cm in length. A fine-grained, heat-treated Ogallala quartzite tertiary flake between 1 and 2 cm in size was also recovered, as were four flake fragments consisting of one piece of fossiliferous chert, one piece of well silicified fine sandstone, and two pieces of poorly silicified sandstone. The size ranges of these four flakes are: two between 1 and 2 cm, and two between 2 and 3 cm.

The angular fragments from this site include one piece of poorly silicified sandstone. This fragment exhibits battering at opposing ends that is typical of bipolar reduction of small cobbles. This item measures 4.0 cm x 3.3 cm x 1.7 cm and weighs 23.6 g. Six of the other angular fragments are Ogallala quartzite and the seventh is a piece of Alibates chert. Four of these fragments range in size from 2 to 3 cm and three are between 4 and 5 cm in size.

A split cobble of gray metaquartzite exhibits battering on one end, and apparently served as a hammerstone. Other hammerstones collected during this survey are also of this same material. This piece measures 5.4 cm x 5.1 cm x 2.1 cm and weighs 69.05 g.

Summary

This site has been extremely disturbed, even prior to being recently graded. Without diagnostic artifacts or in situ archeological deposits, the site cannot be considered to have significant research value. No further work is recommended. This site is not recommended for inclusion in the NRHP.

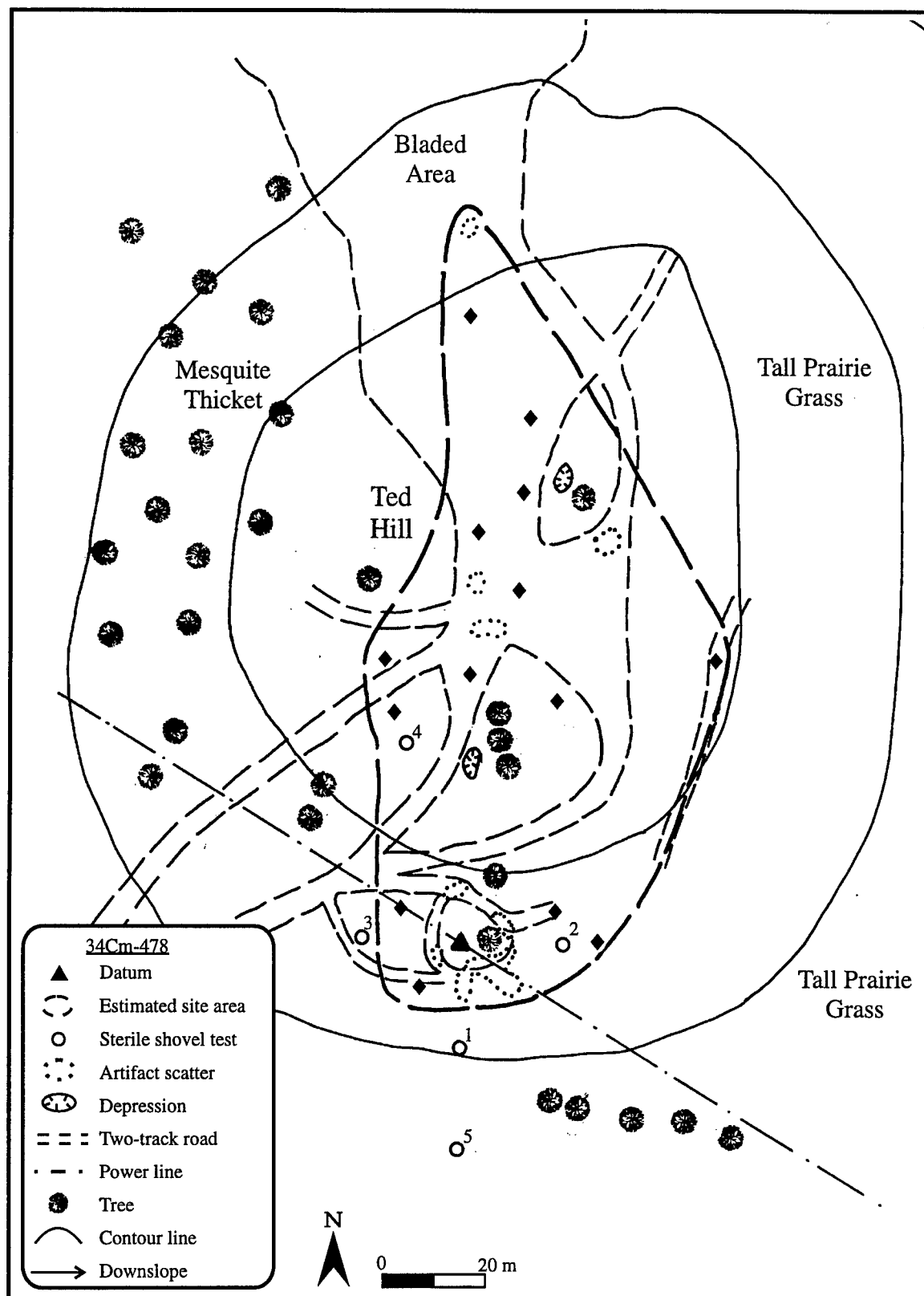


Figure 82. Plan map of site 34Cm-478 (92-113).

34Cm-289 (92-145)

This site is located within an area known to contain live ordnance (rifle-launched grenades). After supervisory personnel went to the site location and observed exploded ordnance on the ground surface, the determination was made that it was unsafe for a full survey of the area. Soil in this area is mapped as Port-Slickspots complex. Site elevation is 354 m (1,160 ft) amsl. One quartzite core was observed while leaving the site. No estimate of site area was attempted and no map of the site was drawn.

34Cm-290 (92-147)

This site is located within an area known to contain live ordnance (rifle-launched grenades). Supervisory personnel went to the site location and observed exploded ordnance on the ground surface and made the determination that it was unsafe for a full survey of the area. Soil in this area is mapped as Port-Slickspots complex and Vernon soils. Site elevation is 357 m (1,170 ft) amsl. Two chert flakes were observed in the dirt road that crosses the eastern edge of the site and one chert flake was observed on the floodplain bordering East Branch Wolf Creek. No estimate of site area was attempted and no map of the site was drawn.

Survey Area 5

This 1,524-acre survey area borders the northern boundary of the West Range Impact Area (Figure 83). The terrain is dominated by moderately rolling hills grading into steeper hills to the north. On the southwest, the survey area extends into the Blue Beaver Creek valley, an area with steep valley slopes and some deeply dissected ravines. The underlying bedrock is primarily rhyolite and diabase; however, granite can be found at the northern edge, and granite and rhyolite porphyry conglomerate within the Blue Beaver Creek valley.

Soils are dominated by rock land and granite cobbly land; however, a fairly large area of Foard-Slickspots complex is mapped in the southeast corner of survey area. Alluvial soils consist of broken alluvial land at Deer Creek's headwater and Port loam and Lawton loam located along Blue Beaver Creek. These two intermittent drainages are the only significant water sources in this area.

Four previously recorded sites are known for the survey area. Three of these sites, prehistoric sites 34Cm-66 and 34Cm-68, and historic site 34Cm-358, were relocated during the course of the 1992 survey. In addition, two new sites, prehistoric site 34Cm-453 and multicomponent site 34Cm-470, were identified.

Prehistoric site 34Cm-67 was not relocated. This site was originally recorded as a low density lithic scatter on the eastern edge of Blue Beaver Creek valley. This site's location was easily relocated, but no cultural material was found. The site area has been subjected to very heavy use by military vehicles. Ruts down to 60 cm in depth were observed crossing the site area and extreme erosion was observed in the general area.

34Cm-68 (92-79)

This site was originally recorded as 34Cm-68, a low density lithic scatter on a south-facing slope of a dissected upland ridge east of Blue Beaver Creek. The site is within an area mapped as granite cobbly

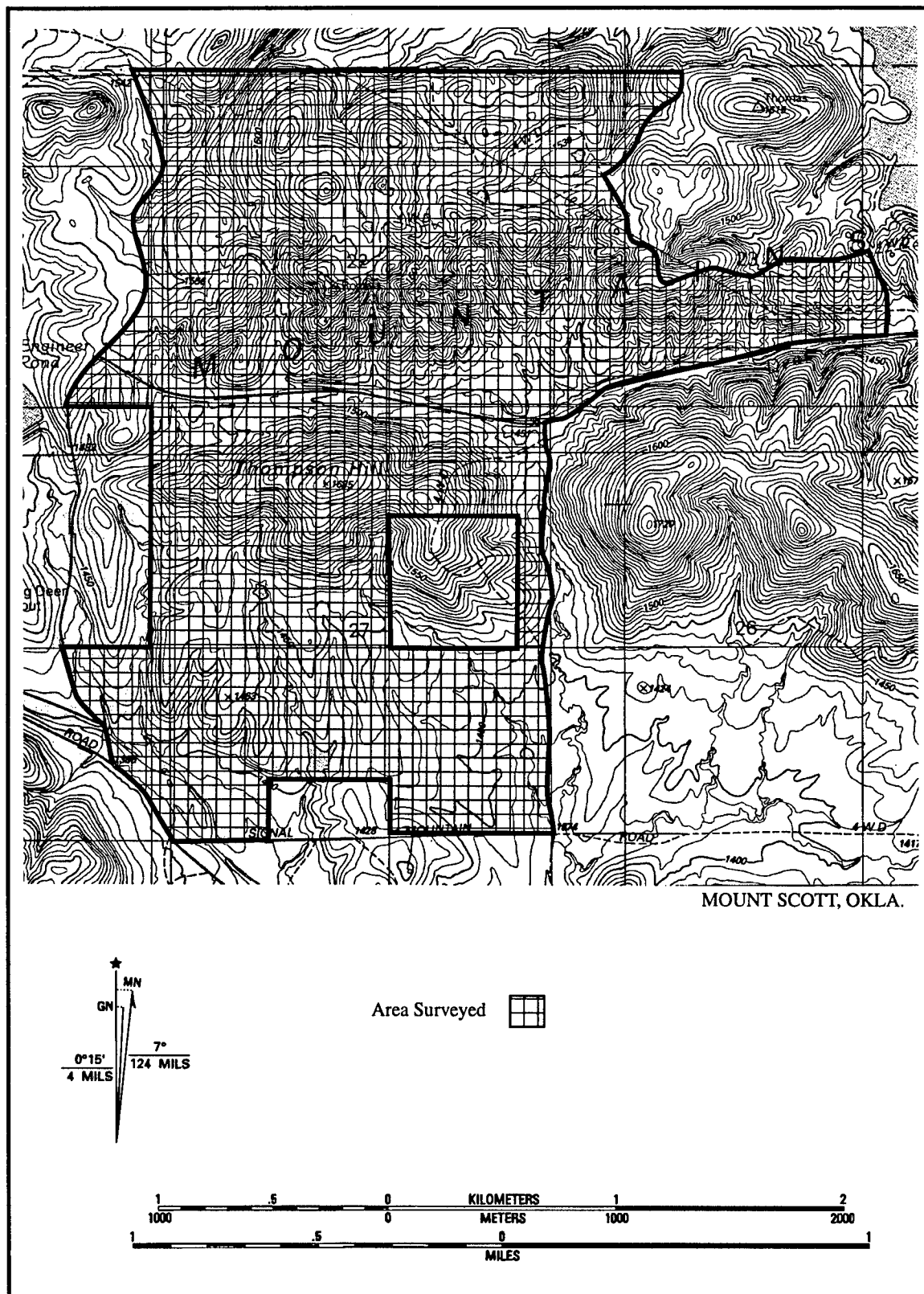


Figure 83. Location of Survey Area 5 within the Fort Sill Military Reservation.

land; site elevation is 433 m (1,420 ft) amsl. Vegetation observed in the area consisted of blackjack oak, elm, sumac, juniper, goldenrod, ragweed, and long stem bunch grass; however, military traffic has almost entirely denuded the site of all vegetation.

Sixteen lithic artifacts were collected from this site when it was first surveyed in 1959. This lithic material was observed on the surface of several unimproved dirt roads that cross the area. The current survey recorded a similar low density scatter of lithic artifacts scattered on the ground surface. A total of 14 items was collected and less than 10 other items were observed on the ground surface. The only diagnostic items found on the site were a chert Harrell point and a possible dart point preform of quartz.

Eight shovel tests were excavated at this site, revealing a very shallow and often disturbed sandy silt deposit. No artifacts were located in any of the shovel tests. Site area is estimated at 4,000 m² (Figure 84).

In addition to prehistoric artifacts, historic material was observed during the current survey. Historic material has been dumped on the western edge of the site, between the lithic scatter and the edge of Blue Beaver Creek. The dump contains four rubble piles of concrete with imbedded granite cobbles and steel reinforced bars and a small amount of whiteware and window glass. No evidence of in situ historic features or artifacts was observed in the area.

Prehistoric Artifacts

Twelve lithic artifacts were collected from the surface of this site. These lithic artifacts consist of a Harrell arrow point, a bifacial preform, a biface fragment, an end scraper, a graver, two modified flakes, and six pieces of lithic debris.

The Harrell arrow point was manufactured from Alibates (5R 5/4) chert (Figure 85a). This artifact is intact except for the tip. The dimensions of the point are 1.5 cm x 1.1 cm x .3 cm; it weighs .6 g. The preform is of smoky (N7) quartz with the size and shape that suggests a dart point (Figure 85b). This item measures 3.5 cm x 2.6 cm x .8 cm and weighs 7.0 g.

The biface fragment is the medial portion of a finished biface of Alibates (5R 3/4) chert that has fine retouch on both lateral edges and use wear on one edge (Figure 85c). The dimensions are 2.1 cm maximum width, 1.8 cm long, .6 cm thick, with a weight of 2.5 g. The graver was made from a large secondary flake of pale brown (10YR 7/4) Edwards chert (Figure 85d). This flake has a cortical platform and 20 percent dorsal cortex remaining. One lateral edge has been primarily bifacially retouched while the proximal portion of the edge has been unifacially retouched into graver spur. Little or no use wear is observable on the spur or retouched edge. This item measures 5.4 cm x 3.3 cm x 1.4 cm and weighs 19.2 g.

The end scraper is a small, thick chert flake with one end steeply chipped and slightly worn. This item measures 1.7 cm x 1.3 cm x .65 cm, weighs 1.3 g, and is made of a very fine-grained chert with a glossy luster and translucency to 1 mm. The color of this tool is strong brown (7.5YR 5/6). One of the two modified flakes is a broken flake of dark gray Edwards chert with retouch on the distal end of both lateral edges. The dimensions are 1.2 cm x 1.0 cm x .15 cm; its weight is .5 g. The second is a cortical flake fragment that has had one edge unifacially modified into a notch. This tool was manufactured from a raw material that resembles Tecovas chalcedony but may be from a local source in the Slick Hills. Dimensions are 2.1 cm x 1.7 cm x .25 cm, with a weight of 2.1 g.

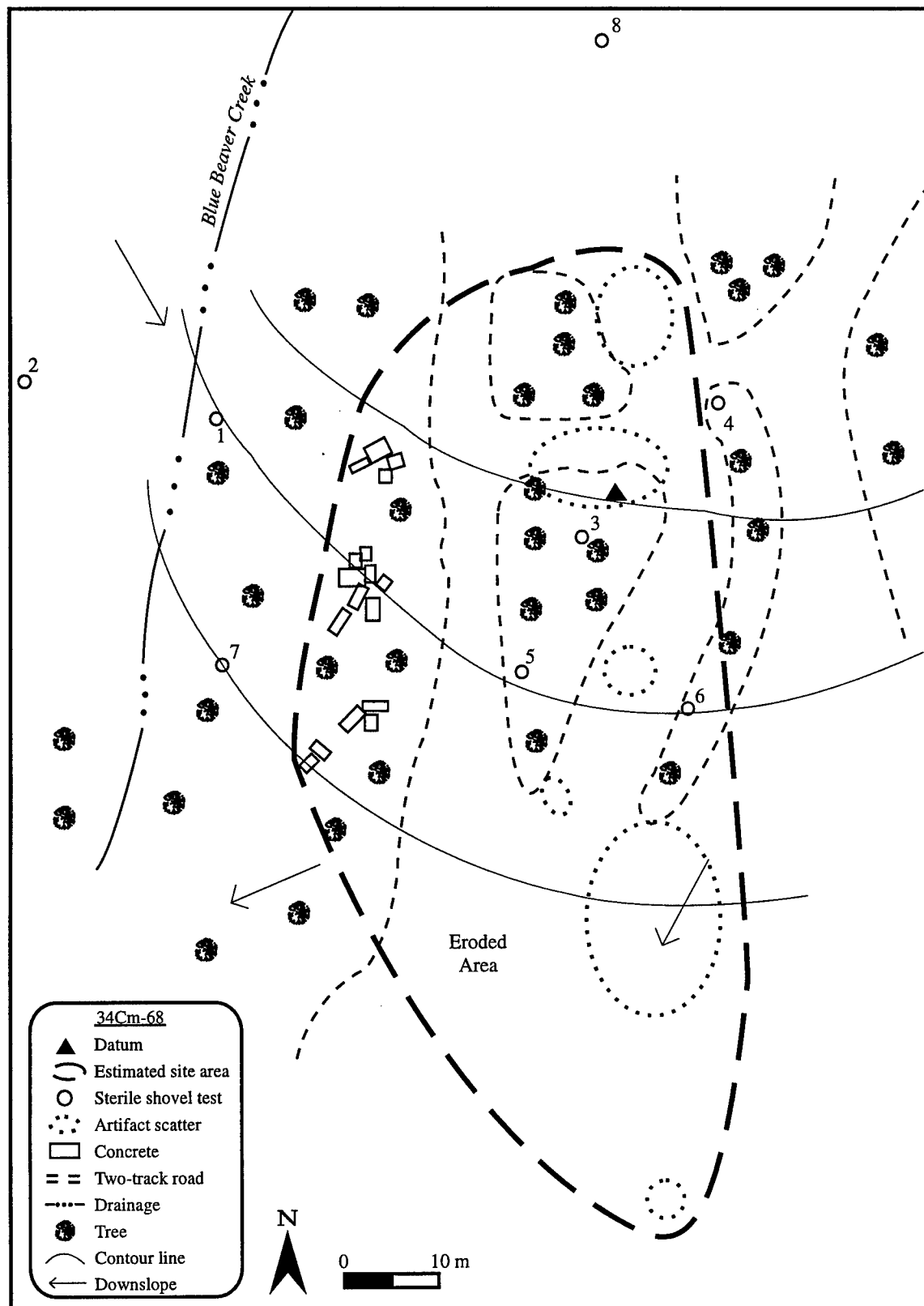


Figure 84. Plan map of site 34Cm-68 (92-79).

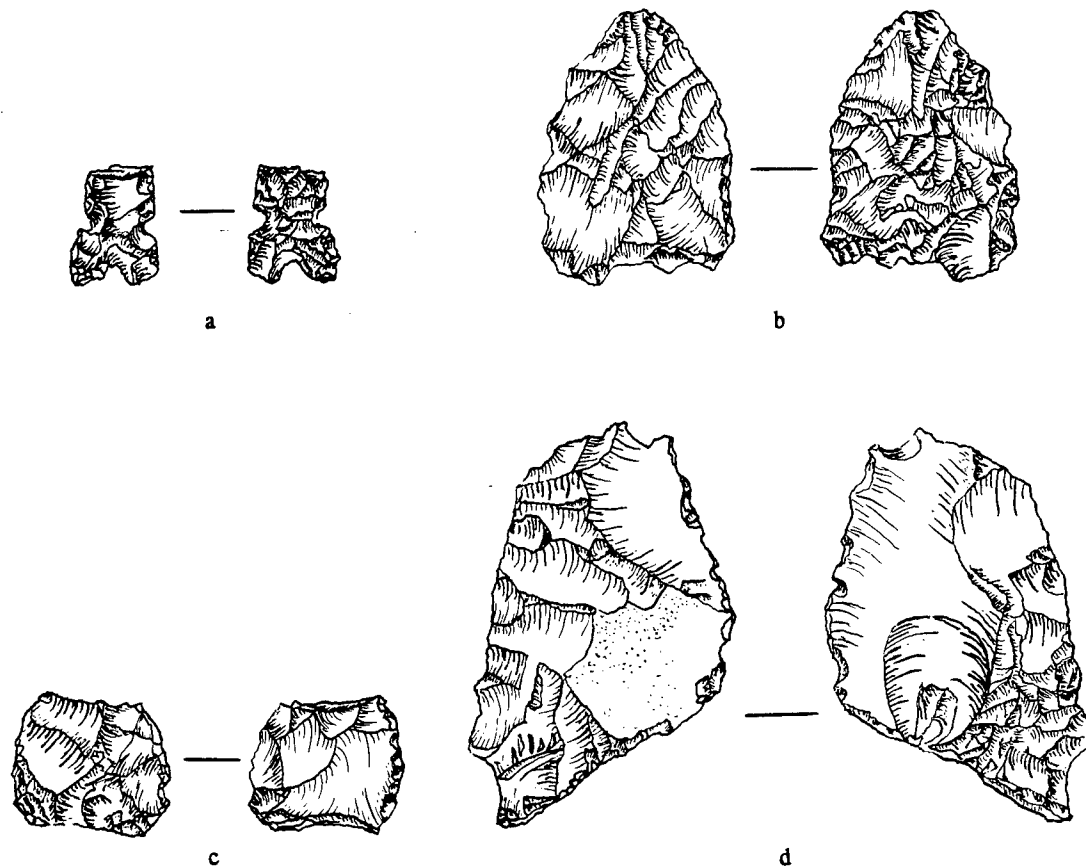


Figure 85. Diagnostic lithic artifacts recovered from 34Cm-68 during the 1992 survey: (a) Alibates chert Harrell point; (b) quartz preform; (c) Alibates chert biface fragment; (d) Edwards chert graver. (Scale 1:1)

Lithic debris collected from the site includes two tertiary flakes, three flake fragments, and one angular fragment. One flake is less than 1 cm in length, while the other five pieces range between 1 and 2 cm in size. The raw materials are of Edwards chert (n=1), Tecovas-like chalcedony (n=1), and unclassified cherts (n=4).

Historic Artifacts

Historic material collected from the surface consisted of a ceramic electrical insulator for house use (post-1920) and one semi-porcelain fragment.

Summary

This site is extremely eroded, with deep gullies and tire ruts crossing the site area. The site is within an area that is heavily utilized for military training, resulting in several hundred acres of eroding, denuded land surface. There is little chance that this site retains any contextual integrity. No further testing is recommended, and the site is not recommended for inclusion in the NRHP.

34Cm-453 (92-80)

Site 34Cm-453 is a low density lithic scatter extending out onto the Blue Beaver Creek valley floor from the base of the dissected eastern slopes of the valley. The soil in this area is mapped as granite cobbly land; site elevation is 433 m (1,420 ft) amsl. Vegetation observed in the area of the site consisted of pecan, post oak, juniper, Johnson grass, long stem bunch grass, poison ivy, and greenbrier.

This site consists of lithic artifacts and faunal material observed on the surface of unimproved dirt roads and within eroded areas. Two Washita points were collected from this site, along with a number of tools. Cultural material recovered indicates a late Plains Village age for this site. The faunal material recovered on this site was not found in direct association with any of the artifacts.

Five shovel tests were excavated in areas expected to retain surface sediments. No material was recovered in any of these shovel tests, and no cultural material was observed in the 1-m deep road cuts observed at the southern end of the site. Site area is estimated at 3,300 m² (Figure 86).

Prehistoric Artifacts

Fourteen lithic artifacts, a large mammal scapula fragment, and a bovid or large cervid molar were collected from the surface of this site. In addition, chert flakes and bone fragments were observed on the ground surface but not collected. Collected lithic artifacts include three arrow points, one end scraper, three modified flakes, and seven pieces of lithic debris.

The arrow points consist of two Washita points and one Fresno point. The first Washita point, complete except for approximately 2 mm at the tip, was made from Alibates (5R 5/1) chert and measures 2.1 cm x 1.2 cm x .4 cm and has a weight of .73 g (Figure 87a). The second Washita point (Figure 87b) is missing approximately half of the blade and one barb. It was made from a grayish brown (10YR 5/2) chert with a few dispersed red inclusions (<.1 mm diameter), and has a fine texture, a satin luster, and a translucency of greater than 3 mm. This item measures 1.6 cm x 1.3 cm x .3 cm and weighs .6 g.

The Fresno point was created on a tertiary flake of Alibates (5R 4/2) chert (Figure 87c). The point was primarily chipped on the dorsal surface of the flake, with only minor retouch to the ventral face. The bulb of percussion is still evident on one barb. This small point measures 1.4 cm x 1.1 cm x .4 cm and weighs .45 g. The end scraper was formed on a flake of Edwards (N5) chert that has had its proximal end and adjoining edges heavily modified (Figure 87d). This tool has been so heavily utilized that the scraper bit is entirely rounded and it is difficult to tell whether the item was originally unifacially worked into a scraper or was bifacially worked into a small cutting tool. This specimen was classified as a scraper based on the steepness of the remaining bit. The dimensions of this tool are 2.4 cm x 1.9 cm x .4 cm; it weighs 1.9 g.

One of the modified flakes is of Kay County chert while the other two are of Alibates chert. The first is a thick tertiary flake with one lateral edge marginally modified into a steep, scraper-like edge. This edge exhibits moderately use wear, measures 2.5 cm x 2.4 cm x .7 cm, and weighs 4.6 g. The utilized Alibates flakes are both modified tertiary flakes. The first is a thin flake with fine unifacial retouch on all edges except the proximal end. This item measures 3.0 cm x 2.2 cm x .4 cm and weighs 2.5 g. The second item is a thick fragment of a tertiary flake. Only one original edge remains on this flake. This flake edge was possibly steeply chipped; however, the fragmentary nature of this piece of Alibates chert makes it difficult to analyze. It is possible that the modification is entirely from use wear. The item is a very deep

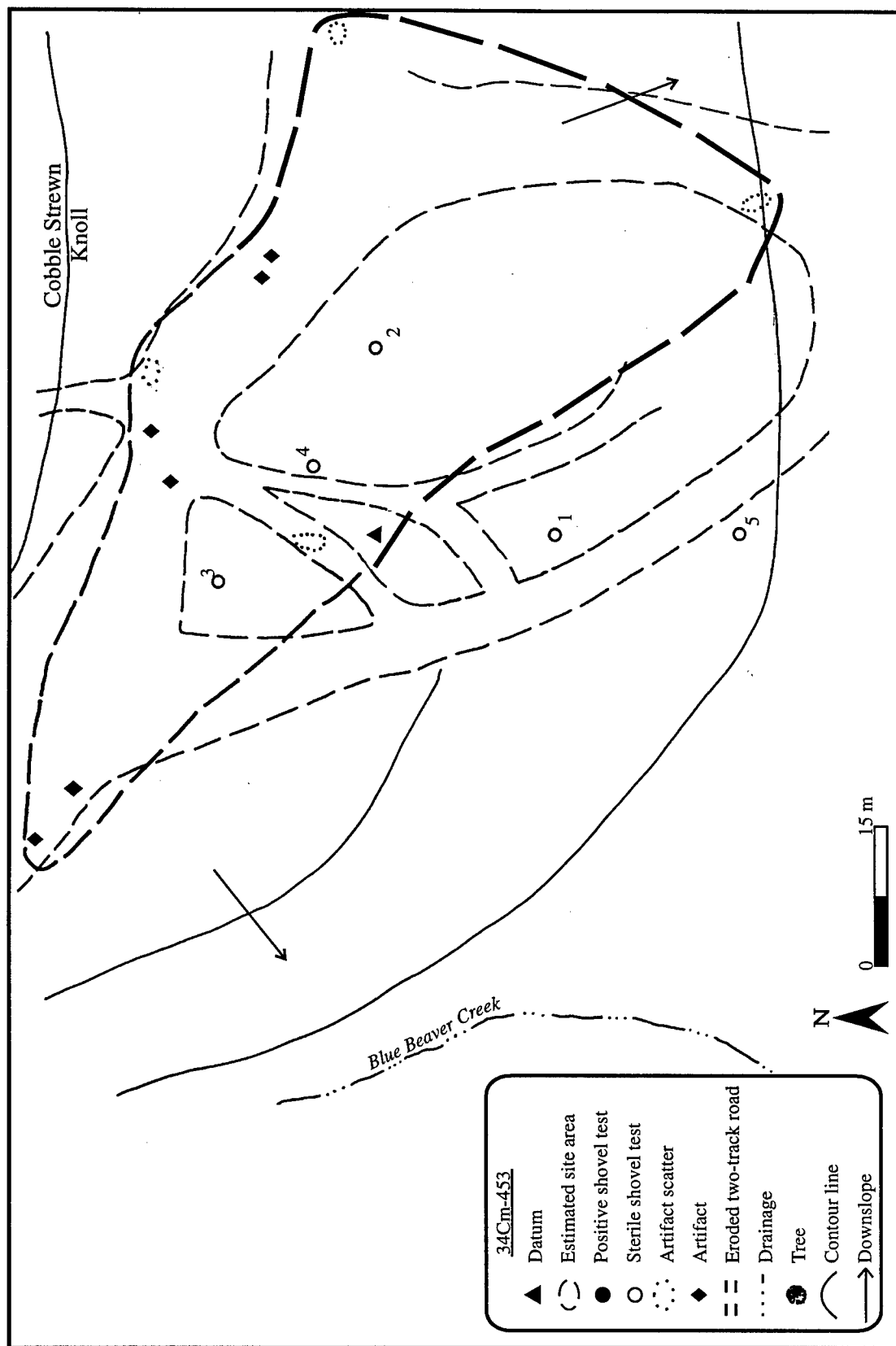


Figure 86. Plan map of site 34Cm-453 (92-80).

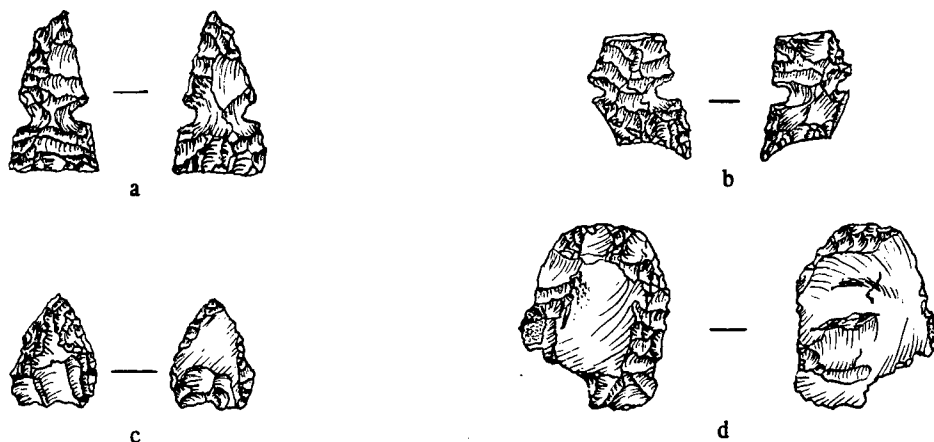


Figure 87. Diagnostic lithic artifacts recovered from 34Cm-453 during the 1992 survey: (a) Alibates chert Washita point; (b) chert Washita point; (c) Alibates chert Fresno point; (d) Edwards chert end scraper. (Scale 1:1)

red with pot lid fractures on the dorsal surface, indicating exposure to extreme heat, probably after modification. This item measures 2.0 cm x 2.0 cm x .5 cm and weighs 1.0 g.

The lithic debris from this site consists of six flake fragments and one angular fragment. Three of these artifacts are of Alibates chert, one is of Edwards chert, one is of unidentified, very pale brown chert, one is of quartz, and one is of a purple material that may be chalcedony. Three pieces of this lithic debris are less than 1 cm in length while the other three fall into the 1 to 2 cm size range.

One item only was recovered from a shovel test at this site. This was a small piece of coal (>2 cm dia.) recovered from Level 1 of Shovel Test 1. Coal was observed on the ground surface approximately 150 m south of this site and is probably related to military usage of the site.

Summary

This area has been extremely disturbed by several dirt roads that cross the site area and by a tremendous amount of erosion resulting from the military traffic on these roads. These destructive forces have left the majority of the site a denuded land surface with little soil or vegetation remaining. Ninety percent of the site area lies within the dirt roads and eroded sections. No further work is recommended for this site, and it is not recommended for inclusion in the NRHP.

34Cm-66 (92-81)

This site is very low density lithic scatter located on the east bank of Blue Beaver Creek. The soil is mapped as Lawton loam, and site elevation is 427 m (1,400 ft) amsl. Vegetation observed in the area of the site consisted of pecan, sumac, post oak, elm, willow, hackberry, juniper, long stem bunch grass, Johnson grass, goldenrod, black-eyed Susan, ragweed, and thistle.

This site was originally recorded by Shaeffer in 1960 and reinvestigated and partially excavated in 1977 by the Museum of the Great Plains. Shaeffer recorded this site as a 1,400-m² open prehistoric camp with hearths buried in the creek bank and collected a total of 166 lithic artifacts.

The Museum of the Great Plains apparently relocated this site in 1977, but recorded it under the site designation 34Cm-67. Locational information for both site 34Cm-66 and 34Cm-67 is very confusing, caused by inconsistencies between written descriptions, UTM coordinates, and map plottings. However, Shaeffer recorded site 34Cm-67 as a low density lithic scatter 300 m east of Blue Beaver Creek. The Museum of the Great Plains recorded 34Cm-67 as a high density lithic scatter extending for 200 m to 300 m along the Blue Beaver Creek bank; a total of 240 lithic artifacts was collected from the surface, while test excavations failed to recover any cultural material. From the site descriptions it is believed that Shaeffer's site 34Cm-66 is the Museum of the Great Plains' site 34Cm-67.

The current survey investigated potential locations for sites 34Cm-66 and 34Cm-67. The location of Shaeffer's 34Cm-67 was found, but no cultural material was observed at this location. Site 34Cm-67 is in an area that is extremely eroded due to military training activities, so it may have been destroyed by said activities. One of the two site locations given for 34Cm-67 by the Museum of the Great Plains, west of Blue Beaver Creek, was investigated and found to contain no cultural material. The other location given by the Museum of the Great Plains for site 34Cm-67 is east of Blue Beaver Creek and closely matches Shaeffer's location of 34Cm-66. This area was investigated and was found to contain the cultural material described below.

A low density artifact scatter consisting of 17 flakes and shatter and a metate fragment were observed on the surface of an unimproved dirt road that parallels the east bank of Blue Beaver Creek, approximately 5 to 10 m from the creek bed. Cultural material was observed for 150 m along this road.

The entire area east of the dirt road is disturbed from military traffic. No vegetation remains in this area. Nine shovel tests were excavated between the dirt road and the creek bank, the only relatively undisturbed area remaining. None of these test units recovered any prehistoric artifacts, but two test units yielded military-related debris to a depth of 40 cm. No cultural material was observed in the creek bank.

No lithic artifacts were collected from this site; what little material remains was left in place. Total site area is estimated at 2,600 m² (Figure 88).

Summary

The current investigation has found that site 34Cm-66 has been totally destroyed. While this area was being surveyed, 12 mobile howitzers and a variety of support trucks and personnel rolled onto this site to use the firing points at this location. Firing activities such as this and military maneuvers, military campsites, and tank exercises have completely destroyed this site. No further work is recommended for this site, and it is not recommended for inclusion in the NRHP.

34Cm-358 (92-82): Ketch Ranch

Site 34Cm-358 contains the remains of a historic ranch known as Ketch Ranch. The ranch is located on the west bank of Blue Beaver Creek. Soil in this area is mapped as Port loam. The elevation of the site

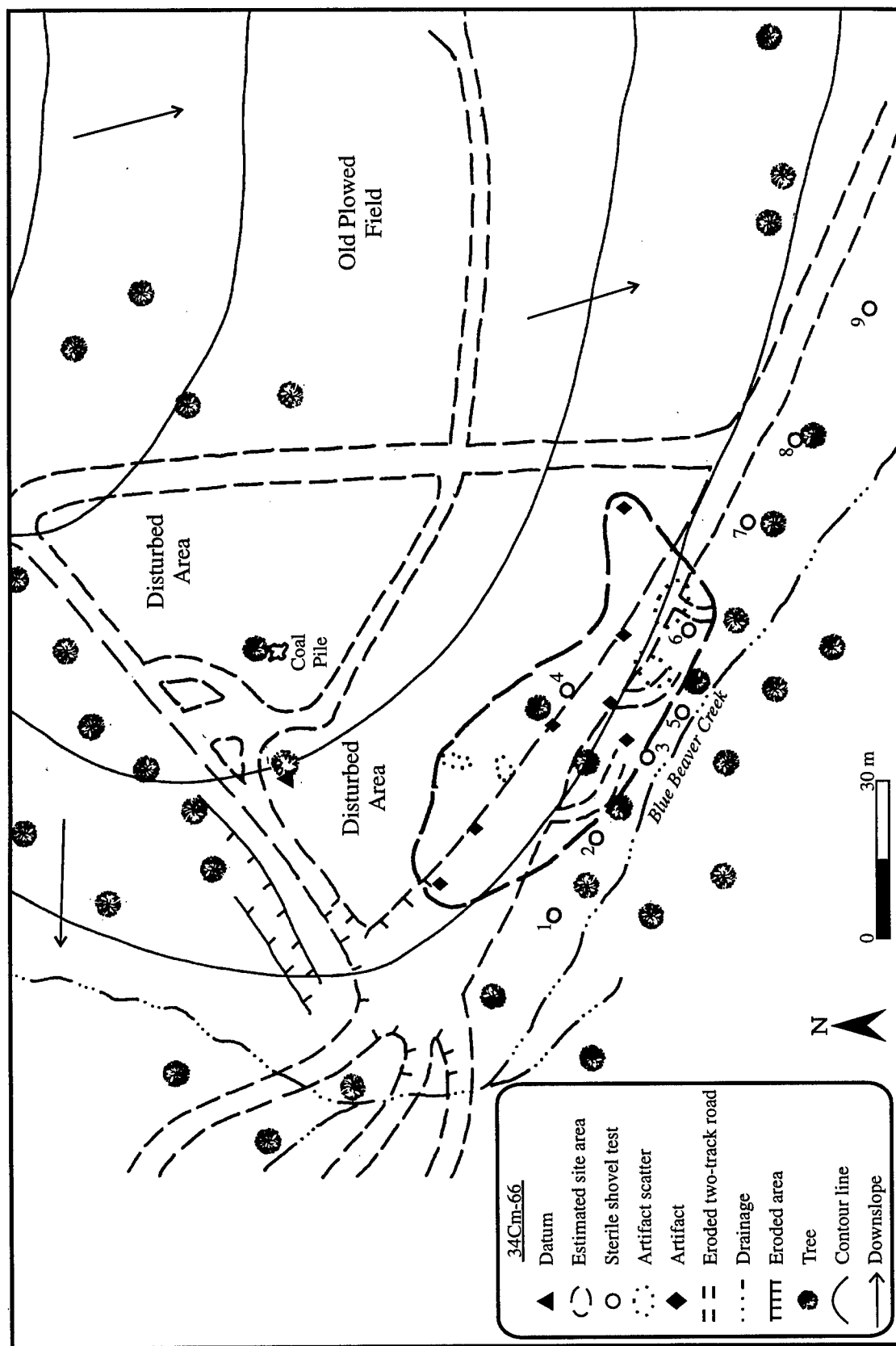


Figure 88. Plan map of site 34Cm-66 (92-81).

is 427 m (1,400 ft) amsl, and vegetation observed in the area of the site consisted of mesquite, hackberry, post oak, juniper, pecan, elm, willow, black locust, long stem bunch grass, Johnson grass, Bermuda grass, greenbrier, and poison ivy.

This site contains 12 features, including foundations, rubble piles, and a large scatter of historic artifacts. Nine of the foundations are located on a flat terrace west of Blue Beaver Creek, while a pump house and a seep well are located in Blue Beaver Creek's main channel.

The largest feature is a partial house foundation of pier-and-beam construction. It is made of concrete and granite cobbles, and is estimated to have measured 6 m by 12.5 m. This house foundation is surrounded by the foundation of a concrete-and-granite-cobbled wall. The wall measures 25 m by 30 m, and had a gateway facing to the south.

Other features include a storm shelter, a seep well, a pump house, a 15-x-7-m barn foundation, a holding pen area, a concrete livestock trough, two depressions, a concrete culvert of a probable bridge drainage, and two gate/postholes areas. Also observed were three rubble piles of granite cobble and steel bar-imbedded concrete as well as metal sheets deposited in the creek.

A high density of artifacts was observed even though there was a dense ground cover of tall grasses. Items observed but not collected included glass electrical insulators near the barn foundation, metal door hinges, vessel glass fragments, whiteware fragments, and tin cans. A moderate amount of recent military debris was also observed. Thirteen shovel test were excavated at this site, with four yielding a small amount of cultural material. Site area is estimated at 12,000 m² (Figure 89).

Historic Artifacts

Diagnostic historic material from four shovel tests and the surface included ceramics, glassware, and metal artifacts (Figure 90). Diagnostic materials recovered from the shovel tests consisted of a manganese solarized (amethyst) glass fragment (1880-1920), an ash tint glass bottle fragment (1915-1990), one sanitary tin can lid (1902-1990), two tin can fragments (post-1897), and two wire nails (1880-1990). Three window pane fragments were also recovered from the shovel tests. Diagnostic ceramics from the surface consisted of one geometric decalcomania decorated white-whiteware fragment (1940-1990), one floral decalcomania decorated white-whiteware (1895-1950), a white-whiteware fragment (1890-1990), and two exterior/interior bristol stoneware fragments (1900-1990). Other diagnostic material collected from the surface consisted of an embossed aqua glass bottle (1860-1990) and a zinc canning seal (1865-1915), with an intact Boyd's Genuine opaque liner (1900-1950).

Summary

The removal of the structures from this site disturbed the cultural deposits, but subsequent disturbances appear to have been minor. There is no evidence for military vehicular traffic crossing this site; military activity appears to be limited to foot traffic. This site has good potential for containing intact cultural deposits relating to one of the largest ranches operated in this area. Further testing as well as additional archival research is recommended to evaluate fully this site's potential for inclusion in the NRHP.

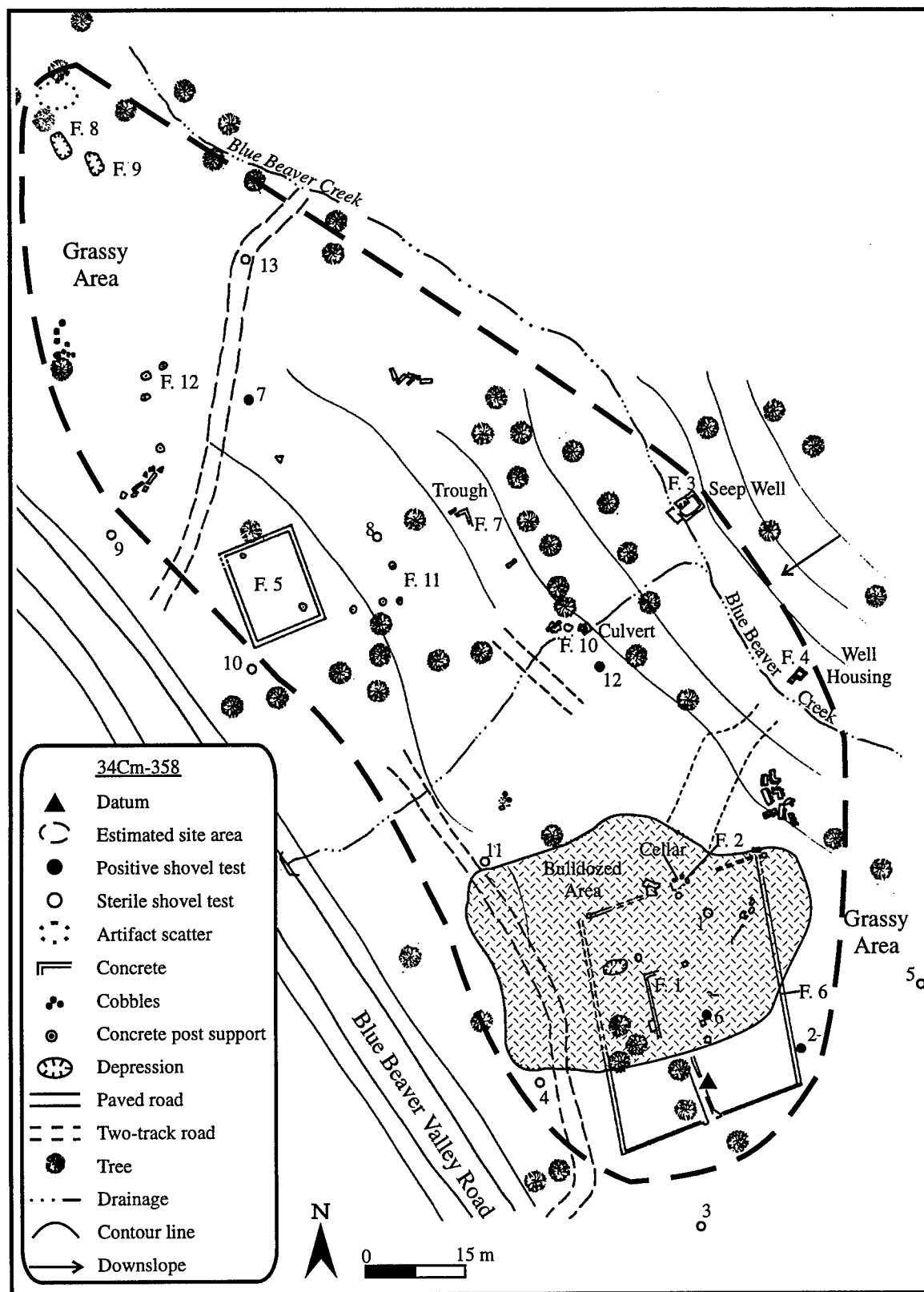


Figure 89. Plan map of site 34Cm-358 (92-82).

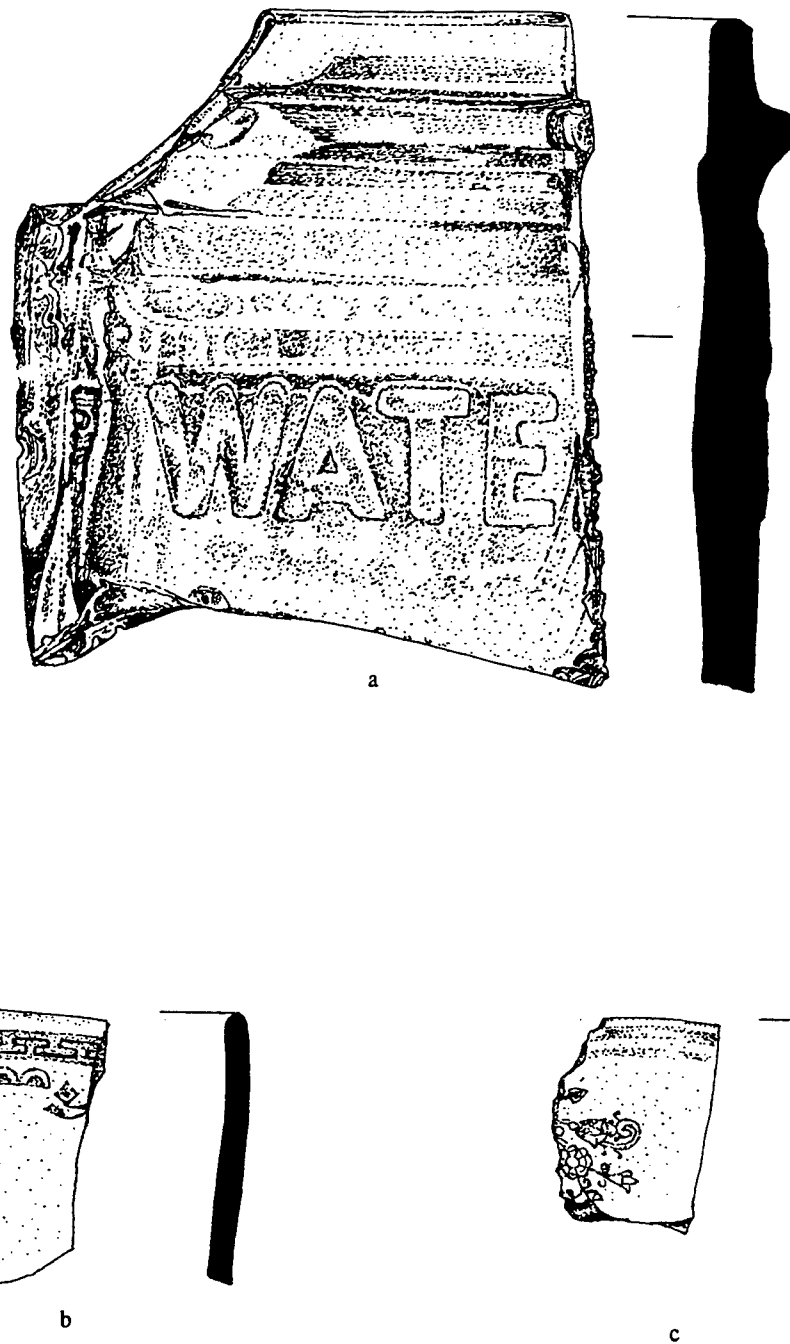


Figure 90. Selected historic artifacts from 34Cm-358: (a) large aqua water jar; (b) whiteware with geometric decalcomania decoration; (c) whiteware with floral decalcomania decoration. (Scale 1:1)

34Cm-470 (92-104)

Located in Deer Creek's narrow valley, this site is a very low density prehistoric lithic scatter in an unimproved dirt road. Soil in this deeply dissected uplands area is mapped as breaks-alluvial land; however, very little soil was observed during survey. Decomposing granite gravel is the primary surface material. Site elevation is 457 m (1,500 ft) amsl. Vegetation observed in the area of the site consisted of oak, juniper, mixed grasses, and wildflowers.

This site consists of lithic debris and a projectile point observed within an unimproved dirt road or in the eroded area bordering the road. Observed but not collected were three flakes of clear quartz, milky quartz, and mottled red chert. Also observed were small fragments of whiteware, manganese solarized glass, and a metal fragment. No shovel tests were excavated due to the absence of sediments. MRE packaging, expended rifle cartridges, tin cans, and aluminum cans were also observed scattered over the site area, which encompasses approximately 600 m² (Figure 91).

Prehistoric Artifacts

A single projectile point and two flake fragments were collected from the surface of this site. Three additional pieces of lithic debris were observed on the surface but not collected.

The projectile point is a Scallorn point made of Ogallala (5R 5/2) quartzite (Figure 92). The tip and one barb with the adjoining portion of the tang have been eliminated. The point's blade edges are straight and finely retouched, while the body exhibits much coarser finish. The measurements of this specimen are 3.1 cm x 1.8 cm x .6 cm; it weighs 3.5 g.

One of the flake fragments is of Ogallala quartzite, while the second is of oolitic chert identical to chert found on site 34Cm-75 (92-92). These items measure 1.8 cm long and 2.7 cm long, respectively.

Summary

This site is a very low density lithic scatter in an area that supports little to no surface sediments. No subsurface material is expected at this location and, considering its topographic position, it is likely that no buried deposits ever existed. No further work is recommended for this site, and it is not recommended for inclusion in the NRHP.

Survey Area 6

This rugged section of the project area contains 2,859 acres (Figure 93). Described as moderate to steeply sloping hills, this area falls within the Wichita Mountains, an area containing deep, narrow valleys, faults, cliffs, and crevasses. Bedrock is primarily granite, with a small amount of granite and rhyolite porphyry conglomerate at the margins of the survey area and a small area of rhyolite and diabase at the very northern tip of the survey area. Soils in the area are a mixture of rock land, stony rock land, granite outcrop, and granite cobbly land. Alluvial soils are confined to a small area of Port loam at the northern foot of Mount McKinley and a thin strip of broken alluvial land bordering Crater Creek on the western boundary of the survey area. In addition to Crater Creek, the headwaters and upper reaches of West Branch Blue Beaver Creek and another unnamed drainage form the major drainages within this area, all of which are intermittent in nature.

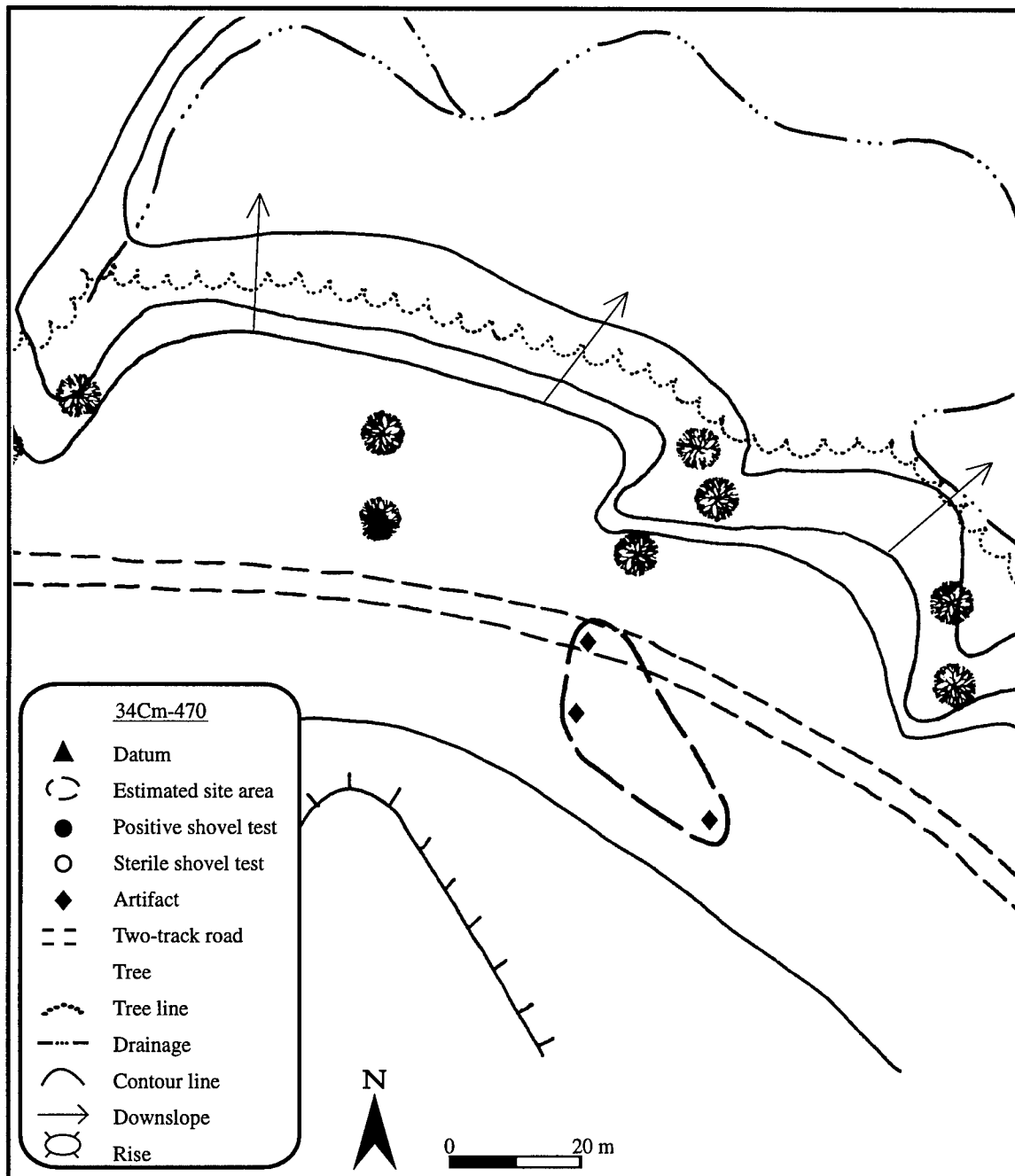


Figure 91. Plan map of 34Cm-470 (92-104).

Of the four previously recorded sites in this area, only two, prehistoric sites 34Cm-78 and 34Cm-303, were relocated. Only a small amount of lithic material was observed at either of these sites. Site 34Cm-77 reportedly lies within an area used for military training in the 1960s, and appears to have been destroyed since its initial recording in 1959. Locational information for the fourth site, 34Cm-128, is confusing, caused by three conflicting location descriptions given in various publications. All three locations were

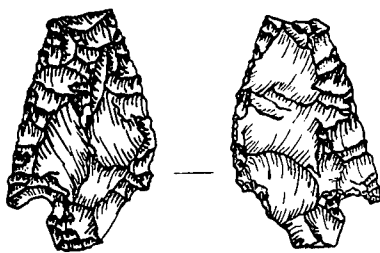


Figure 92. Diagnostic lithic artifact recovered from 34Cm-470 during the 1992 survey: Ogallala quartzite Scallorn point. (Scale 1:1)

surveyed, and two were found to contain prehistoric material. Of these two locations, site 34Cm-447 most closely matches the description of 34Cm-128. However, site 34Cm-447 has a much larger surface area and more cultural components than those described for 34Cm-128.

In addition to the previously recorded sites, five new prehistoric sites were recorded; these included sites 34Cm-447, 34Cm-448, 34Cm-458, 34Cm-459, and 34Cm-463. Six historic sites, 34Cm-442, 34Cm-443, 34Cm-444, 34Cm-468, 34Cm-497, and 34Cm-503, were also recorded, as was one multicomponent site, 34Cm-469.

34Cm-442 (92-64): Craterville Park - Cabin 1

This site consists of a rubble pile of broken reinforced concrete slabs located between the foot of Arapaho Point and Crater Creek's east bank. The soil in this area is mapped as granite cobbly land; site elevation is recorded as 402 m (1,320 ft) amsl. Vegetation observed at the site consisted of a dense stand of post oak and blackjack oak with limited ground cover.

Most of the concrete slabs are building foundations, several with concrete-and-cobble half walls still attached. This concrete-and-cobble construction is identical to that observed on the one remaining tourist cabin still located at Craterville Park. In addition to building remnants, one slab is apparently a concrete well cap or neck. This well cap is not in situ; it is currently laying at an angle on the ground surface, 47 m northeast of the main rubble pile.

A wide scatter of historic glass and whiteware is associated with the slabs, as well as one feature which appears to be a modern military privy. Seven shovel tests were excavated at this site, with one shovel test yielding concrete fragments to a depth of 11 cm bs. Site area is estimated at 2,000 m² (Figure 94).

Historic Artifacts

Seven historic artifacts were observed on the surface at this site. The recovered ceramic material consists of a transitional whiteware fragment (1820-1870) and a white-whiteware fragment (1890-1990). Glass material recovered included an ash tint tumbler (1915-1990) and a clear machine-made threaded bottle lip (1910-1990).

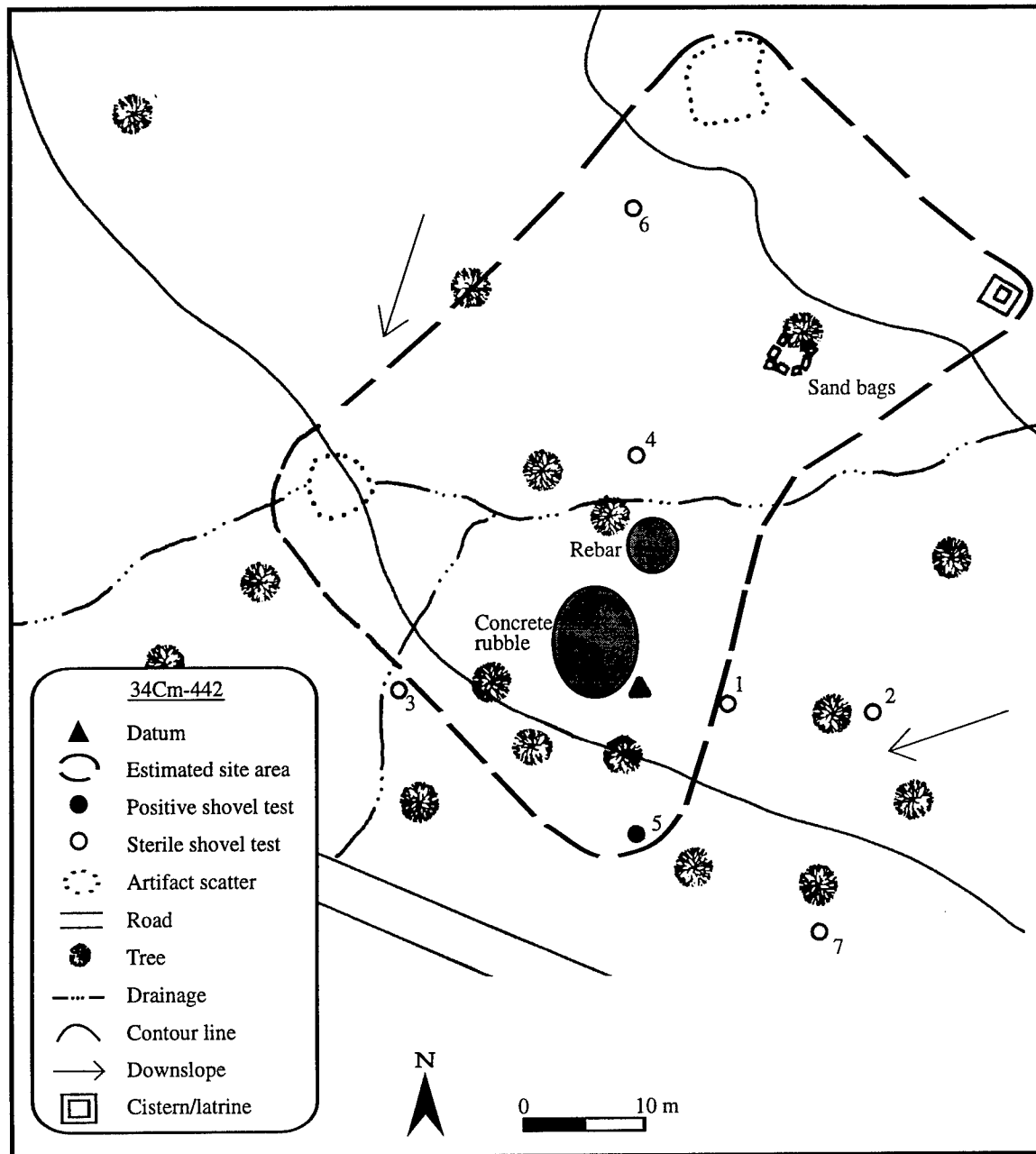


Figure 94. Plan map of 34Cm-442 (92-64): Craterville Park - Cabin 1.

Summary

This site is believed to be the dumping site used by the military for the remains of cabins removed from areas now used for training, bivouacking, and as firing points. No intact cultural deposits are expected at this location. No further work is necessary at this site, and it is not recommended for inclusion in the NRHP.

34Cm-78 (92-65)

This is the location of 34Cm-78, a site recorded by Shaeffer in 1960 as a multiple occupation prehistoric site. The site is located at the southern end of a granite bluff bordering Crater Creek, directly across Crater Creek from previously recorded site 34Cm-77, a prehistoric site which the current survey was not able to relocate. The site is within an area mapped as granite cobbly land and stony rock land. Site elevation is 41 m (1,350 ft) amsl. Vegetation observed at the site consisted of post oak, juniper, pine, cottonwood, blackjack oak, big bluestem grass, and Indian rice grass.

Shaeffer recorded a Fresno point, two dart points, and 22 other lithic artifacts (debris?) for this site. The current survey was able to locate only three flakes at this location, one quartzite and two quartz, all observed on a granite shelf. Five shovel tests were excavated along the alluvial deposit at the eastern edge of the site area; no cultural material was encountered in any shovel test, and none was collected. Site area is currently about 115 m² (Figure 95). An additional seven shovel tests were placed directly west of these tests in an attempt to relocate 34Cm-77; these seven test units also failed to produce any cultural material.

There is a large quantity of recent trash in the area of both sites. Several hundred soda bottles, beer bottles, beer cans, and other trash were spread across an area of approximately 2 acres, indicating heavy use and disturbance of both of these site areas.

Summary

No subsurface cultural deposits were observed at this site, none are expected to exist, and surface material is minimal. No further work is necessary at this site, and it is not recommended for inclusion in the NRHP.

34Cm-443 (92-66): Craterville Park - Pool

This site is the location of the Craterville Park swimming pool, which dates to the first half of the twentieth century. The pool is located within an area mapped as granite cobbly land and stony rock land; however, the pool itself is surrounded by large granite outcrops. The elevation of this site ranges from 396 m (1,300 ft) amsl by the lower dam, to 411 m (1,350 ft) amsl by the upper dam. Vegetation observed at the site consisted of post oak, juniper, cottonwood, blackjack oak, little blue stem grass, and Johnson grass.

Craterville Park's pool was created by construction of a small dam on Crater Creek approximately 250 m downstream of the larger dam that forms Canyon Lake. In addition to the remnants of the pool's dam, the bath house foundation, concrete steps leading into the pool, a concrete diving platform, and the possible remains of a pool slide (Medicine Park's pool had a similar slide in 1946) all still exist at this location (Figure 96).

Also located at this site are the remains of shower stalls, two 1,500-gallon water tanks, and boilers. The boilers may be associated with the Craterville Park pool, but the shower stalls probably date from the 1960s, and the two water tanks have dates of manufacture of 1967 stamped on them. This portion of the site is one of several shower facilities constructed in the Craterville Park area when this area was a major training facility during the Viet Nam War.

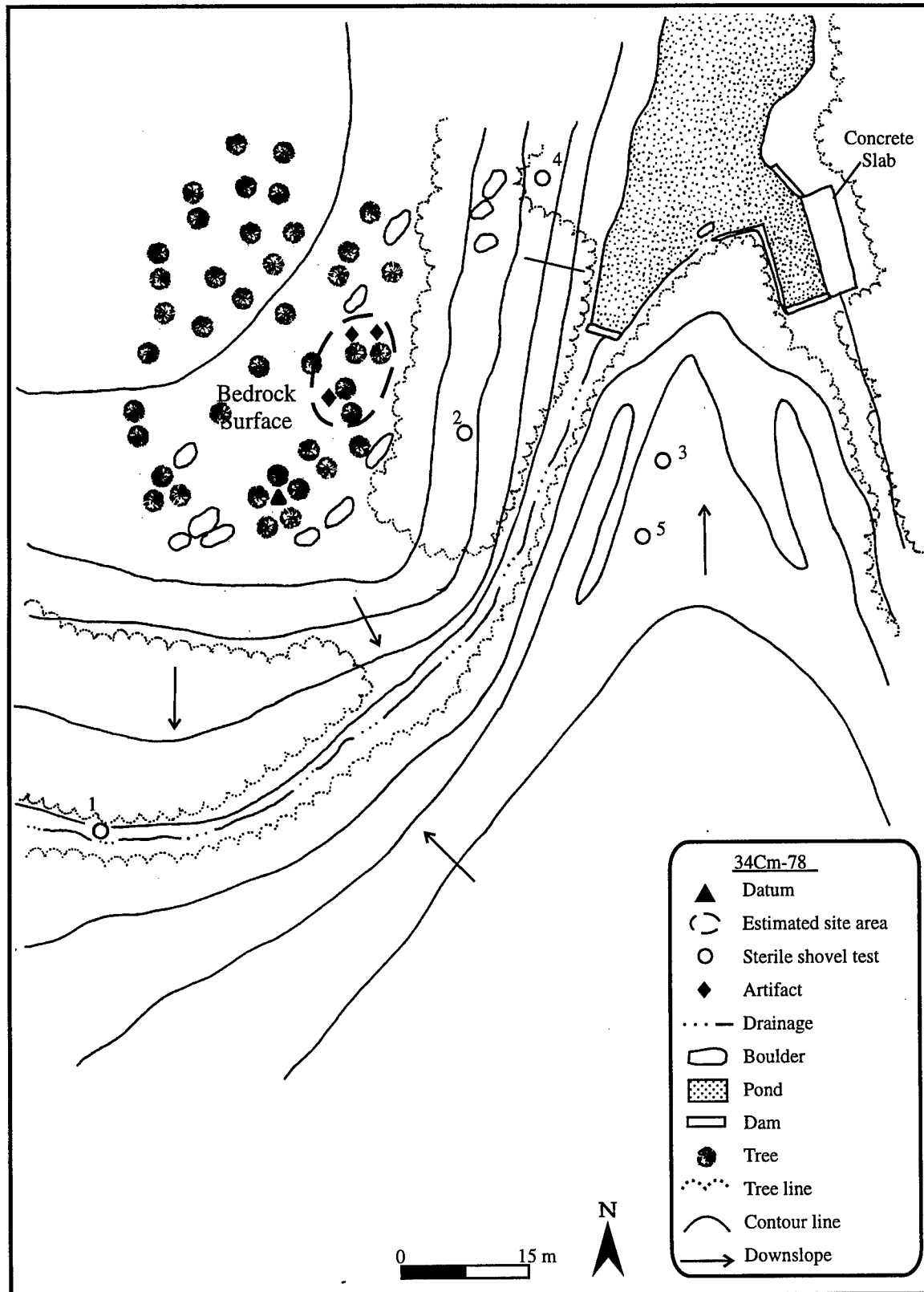


Figure 95. Plan map of site 34Cm-78 (92-65).

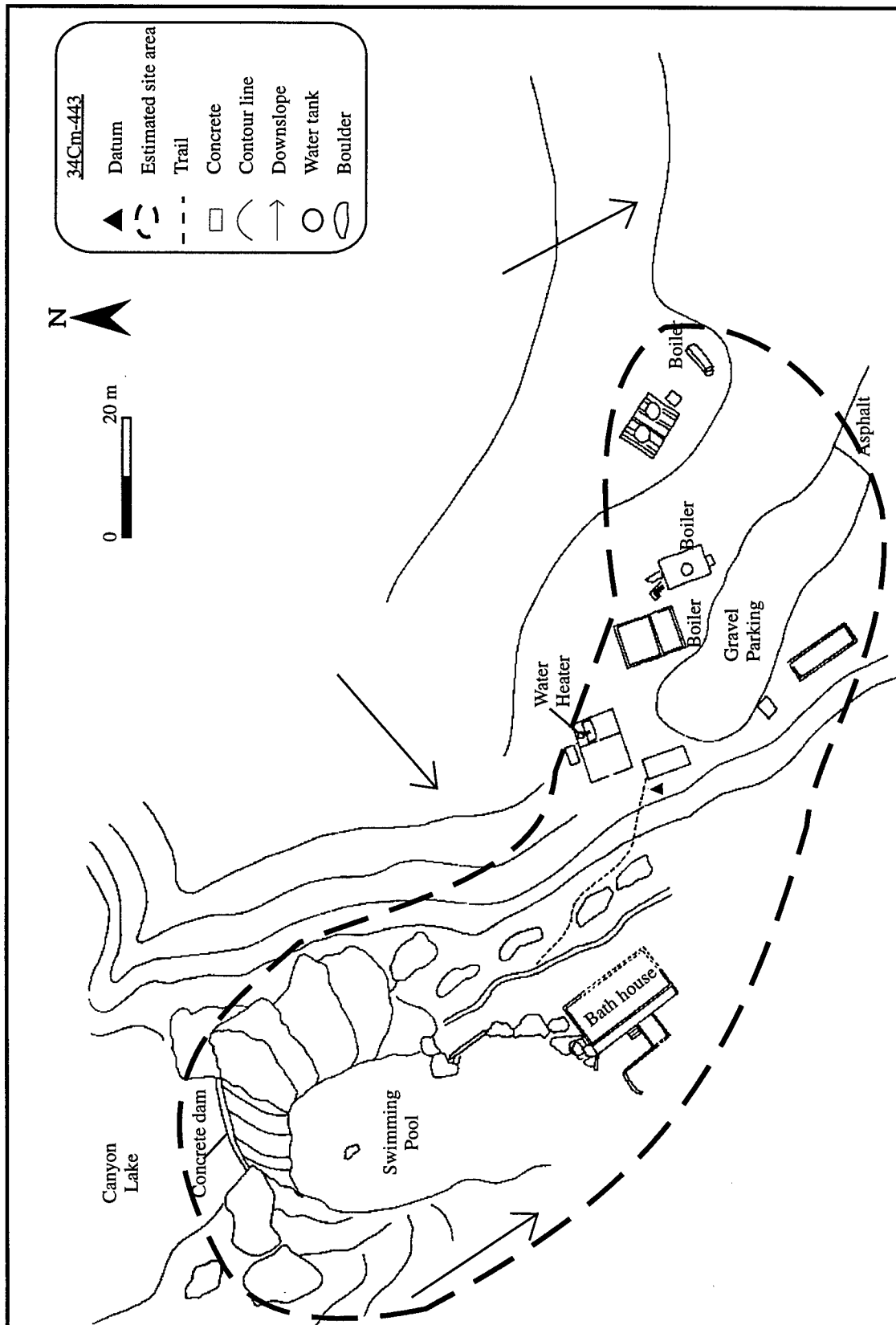


Figure 96. Plan map of site 34Cm-443 (92-66): Craterville Park Pool.

Previously recorded prehistoric site 34Cm-77 was recorded at this location, within and adjacent to the Craterville Park pool's parking lot (which is quite small and may have been partially eroded into Crater Creek). Seven shovel tests were excavated between this parking area and Crater Creek in an attempt to locate 34Cm-77. All seven tests were sterile, but revealed a sandy silt loam as deep as 40 cm in three of the tests. The only cultural material observed on the ground surface was a large quantity of recent trash, primarily soda and beer cans and bottles.

Summary

This site has several intact features relating to the Craterville Amusement Park. The pool is in good condition, but other features are less well preserved; and some features are less than 30 years old and do not relate to the swimming pool or the amusement park. No further work is necessary at this site, but it is recommended for consideration for inclusion in the NRHP.

34Cm-444 (92-67): Craterville Park - Cabin Four

This site represents the remains of another cabin foundation, located on the top and gentle north slope of a dissected upland ridge. The site is located within an area that is mapped as granite cobbly land; site elevation is 418 m (1,370 ft) amsl. Vegetation observed in the area of the site consisted of post oak, blackjack oak, juniper, locust, cottonwood, Johnson grass, blue grass, greenbrier, and poison ivy.

The site consists of an early twentieth century cabin foundation and an associated low-density scatter of whiteware, crockery, amethyst glass, window glass, and metal fragments. The foundation is made of concrete and granite cobbles and measures 4.9 m by 3.5 m. The cabin entrance faces the west and is 94 cm wide. Approximately 50 m east of foundation is an intermittent unnamed drainage that joins Crater Creek approximately 150 m northeast of the site.

The historic scatter associated with the foundation covers an area of 52 m x 55 m and extends down the northern slope of the ridge. Artifacts collected consisted of manganese solarized glass, a medicine bottle, an old metal lock, a milk bottle neck, milk glass fragments, crockery, and one piece of decorative purple glass. Only two shovel tests were excavated, and both were sterile. No soil exists on this ridge; currently, there is only a cobble land surface. Site area is estimated at 2,860 m² (Figure 97).

Historic Artifacts

Eighteen historic artifacts were collected from the surface of this site. Diagnostic ceramic material included an ironstone-whiteware fragment (1840-1910) and an exterior/interior bristol glaze stoneware fragment (1900-1990). Glass artifacts included a fragment of hobnail-mold manganese solarized glass (1880-1920), manganese solarized bottle fragments (1880-1920), machine-made bottles (1910-1990), and ash tint glass fragments (1915-1990). A MBD of 1890 is estimated for the site from the recovered diagnostic historic material.

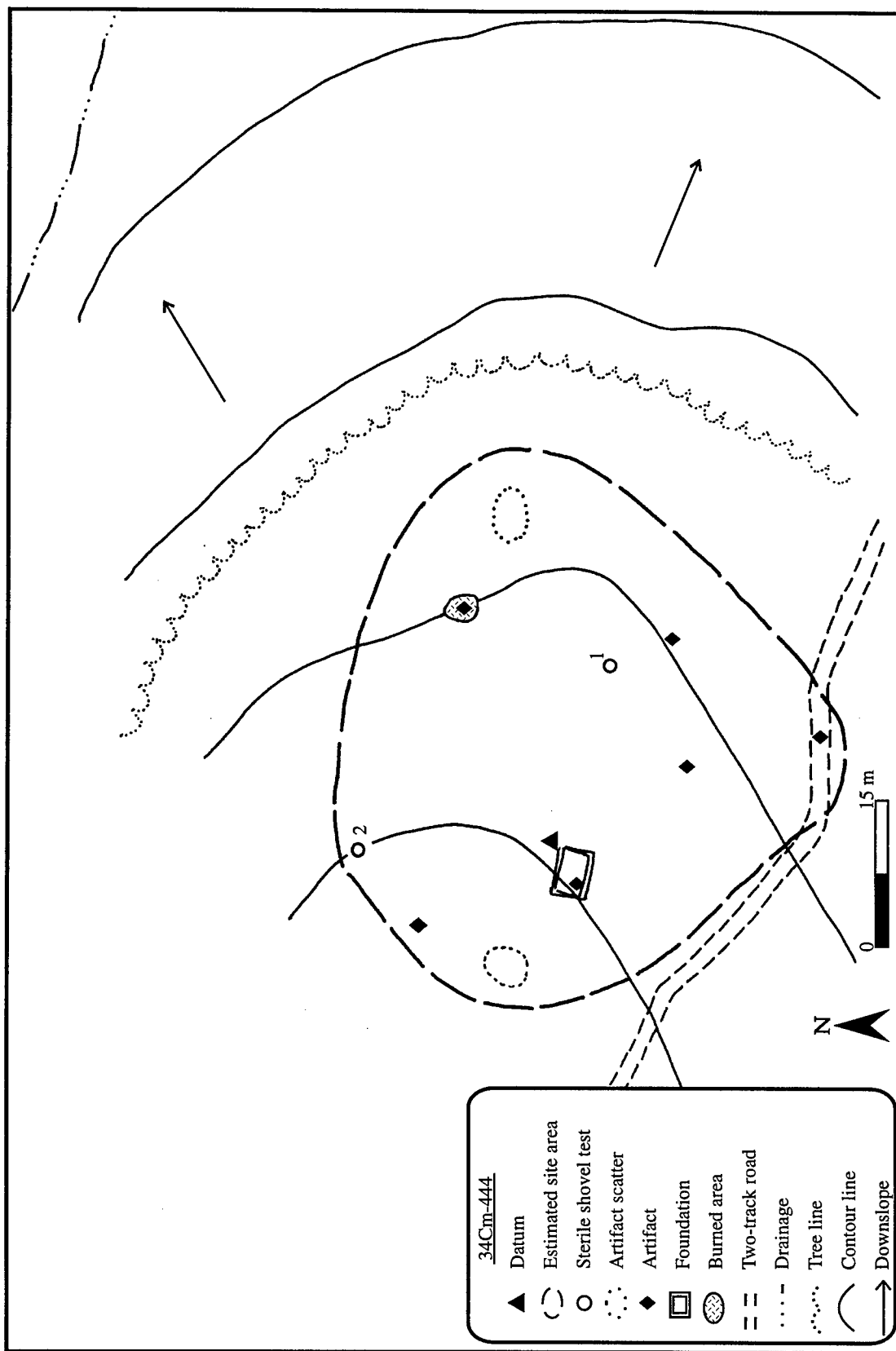


Figure 97. Plan map of site 34Cm-444 (92-67): Craterville Park - Cabin 4.

Summary

This site appears to be associated with the Craterville Amusement Park. Additional archival research is recommended to evaluate fully this site's significance in relation to Craterville Park and its potential for inclusion in the NRHP.

34Cm-447 (92-73)

This prehistoric site is located at the northwestern foot of Mount McKinley and extends for 750 m. Crater Creek is located west of the site, and a moderate-sized tributary of this creek borders the northwestern edge of the site. Soil at this site is mapped as breaks-alluvial land; upslope the soil is mapped as rock land, while granite cobbly land is found downslope to the west. The elevation of this site is 445 m (1,460 ft) amsl. Vegetation observed in the area of the site consisted of post oak, blackjack oak, cottonwood, various small shrubs, Johnson grass, and blue grass.

The site area is bisected by several small drainages, breaking the site into four artifact concentrations (labeled A, B, C, D) located on the small rises between these drainages (Figure 98). A majority of the artifacts was observed in the Fort Sill boundary firebreak. A small amount of material was observed on either side of the firebreak at Concentrations A and B.

The highest density of artifacts was observed in Concentration A. Artifacts observed on the ground surface included a Fresno point, grinding stones, tools, and lithic debris. Two hearths were also observed within the firebreak. Lithic artifacts were observed within the firebreak and on the ground surface 20 m into the Wichita Mountains Wildlife Refuge. No shovel tests were excavated in the refuge.

A Palmillas dart point, lithic tools, lithic debris, and manos were collected from Concentration B. This concentration had the second greatest density of material. Concentrations C and D were both low density lithic scatters, yielding no diagnostic artifacts.

The portion of the site investigated appears to have very little contextual integrity. Only one of 10 shovel tests was positive, yielding a single piece of quartz debris recovered from a shovel test at Concentration A. The portion of the site outside of the boundaries of Fort Sill is potentially less disturbed, but there is no way at this time to estimate the density of cultural material and extent of cultural deposits contained within the wildlife refuge boundaries.

Prehistoric Artifacts

Concentration A

The lithic assemblage from Concentration A consists of one arrow point, three bifaces, three scrapers, five modified flakes, and 82 pieces of lithic debris, all collected from the surface of the firebreak that crosses this site. In addition, two manos, two metate fragments, and a hammerstone were collected from the surface of this site. A moderately dense scatter of lithic tools and debris was observed on the ground surface outside of the firebreak, including surface material across the fence within the Wichita Mountains Wildlife Refuge's boundaries. One quartz angular fragment was found in a shovel test.

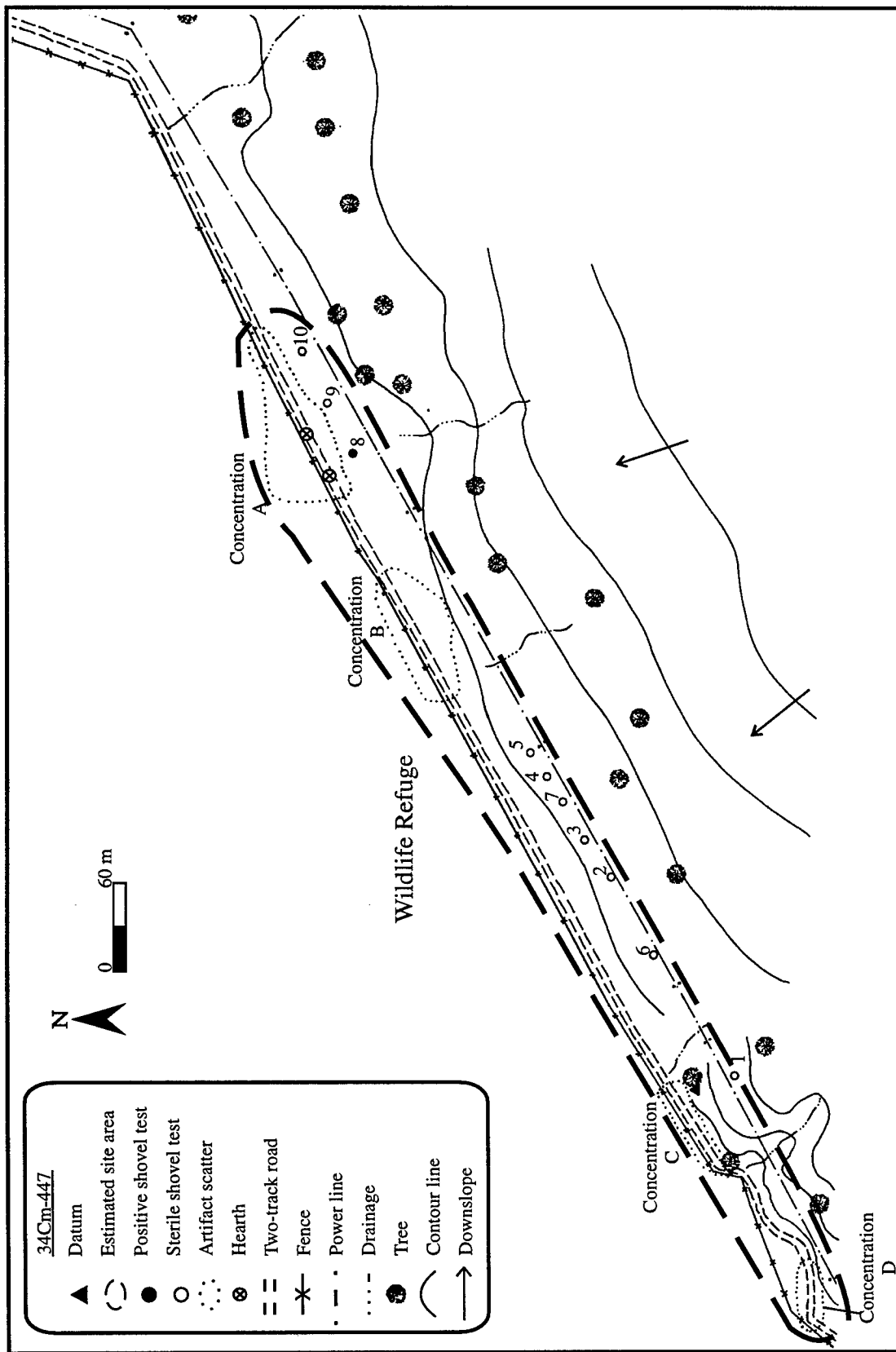


Figure 98. Plan map of site 34Cm-447 (92-73).

Surface

Tools

A Fresno arrow point is the only temporally diagnostic artifact collected from Concentration A (Figure 99). Made on a flake of Ogallala (10YR 6/2) quartzite, this point has been unifacially trimmed to form finely serrated edges. The artifact measures 1.7 cm x 1.0 cm x .2 cm and weighs .4 g.

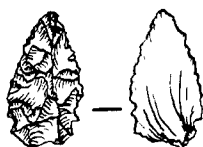


Figure 99. Diagnostic lithic artifact recovered from 34Cm-447 (Concentration A) during the 1992 survey: Ogallala quartzite Fresno point. (Scale 1:1)

Two Ogallala quartzite aborted bifaces were collected from this site. The first biface was discarded fairly late in the manufacturing process. A series of step fractures along one face indicates a failure to adequately thin the biface, forcing its abandonment. This artifact measures 3.2 cm x 2.5 cm x .9 cm and weighs 6.3 g.

The second biface, made on a large flake of quartzite, was apparently abandoned fairly quickly. A substantial amount of cortex is still on one surface. A flaw in the raw material caused a fracture at one end, forcing abandonment of this item. A second fracture at the opposing end of the biface appears to be of recent origin. This artifact measures 4.2 cm x 2.7 cm x 1.1 cm and weighs 10.65 g.

A third aborted biface is made of very dark gray silicified mudstone. This piece was abandoned late in the manufacturing process and even has a small amount of retouch initiated on one edge. A flaw in the material caused a medial fracture of this tool. The measurements of this artifact are 2.5 cm x 2.2 cm x .8 cm, with a weight of 4.35 g.

Three scrapers were collected from this concentration. The first is an end scraper of mottled gray chert. The bit is fractured, with only one margin of the original cutting edge remaining. The opposite end has been extensively trimmed to facilitate hafting. The measurements of this item are 3.0 cm x 1.8 cm x .5 cm; it weighs 3.6 g.

The second scraper is the fragmented bit of an Alibates chert end scraper. Exhibiting heavy use wear on the cutting edge, only 1.1 cm is left of the scraper's end. This item is 1.9 cm across along the edge, .7 cm thick, and weighs 1.5 g.

The third scraper is an elongated side scraper made on a large tertiary flake. The proximal end of the flake, while slightly battered, is unworked. Both lateral edges have been steeply chipped and retouched, while the distal end has snapped off, making it impossible to tell if this end was worked. However, use wear on the lateral edges is concentrated toward the proximal end and the flake thins toward the distal end, making it likely that the missing portion of this tool did not include a working edge. This tool is made of Edwards chert, measures 3.0 cm x 1.8 cm x .5 cm, and weighs 3.6 g.

There were three unifacially modified flakes collected from this concentration. An Ogallala quartzite flake has been steeply chipped and retouched to form a concave edge. Its measurements are 2.1 cm x 1.9 cm x .5 cm, and it weighs 2.1 g. The other two flakes have edge wear but no indication of intentional modification. One flake is of Tecovas-like chalcedony measuring 2.3 cm x 2.1 cm x .3 cm and weighing .85 g. The second utilized flake is of quartz and has measurements of 2.0 cm x 2.0 cm x .3 cm and a weight of 1.1 g.

Four ground stone tools were collected from this concentration. Two disk-shaped hand manos were collected. The first mano is made of coarse, poorly cemented brown (5YR 2/1) sandstone measuring 11.4 cm x 9.4 cm x 3.1 cm and weighing 430.9 g (Figure 100a). The second is of fine-grained, well-cemented dark gray (5YR 5/2) sandstone measuring 12.3 cm x 9.8 cm x 2.9 cm and weighing 543.5 g (Figure 100b).

Two metate fragments were collected and several others observed. These two fragments conjoin and are made of the same dark gray sandstone as the latter of the two manos discussed above. All edges of these fragments are fractured, indicating that the complete metate was larger than the current two fragments. The combined dimensions of these two pieces are 12.3 cm x 8.7 cm x 2.9 cm, with a weight of 382.8 g.

A hammerstone of metaquartzite was also collected from this concentration. This tool is a river cobble and is the same material used for hammerstones on two other sites surveyed during the current project. This piece measures 7.1 cm x 6.9 cm x 3.5 cm and weighs 253.9 g.

Lithic Debris

Lithic debris collected from this part of the site is composed of one primary flake, four secondary flakes, six tertiary flakes, 42 flake fragments, and 29 angular fragments. Raw material types include three pieces of Alibates chert, one piece of Tecovas-like chalcedony, one piece of petrified wood, 17 pieces of other chert, 28 pieces of Ogallala quartzite, one piece of silicified sandstone, 25 pieces of quartz, and six pieces of other lithic material. The size ranges of this material are two pieces less than 1 cm in length, 41 between 1 and 2 cm, 28 between 2 and 3 cm, six between 3 and 4 cm, three between 4 and 5 cm, and two greater than 5 cm in size.

Shovel Test 8, Level 1 (0 to 20 cm bs)

A single quartz angular fragment was recovered from the first level of Shovel Test 8. This fragment is between 1 and 2 cm in length.

Concentration B

One projectile point, four bifaces, one scraper, one unifacially modified tool, and 32 pieces of lithic debris were collected from the surface of this area. One biface fragment and a small amount of lithic debris were observed on the ground surface, including surface material across the fence within the Wichita Mountains Wildlife Refuge boundaries. One long bone fragment from a large mammal was also collected from this concentration.

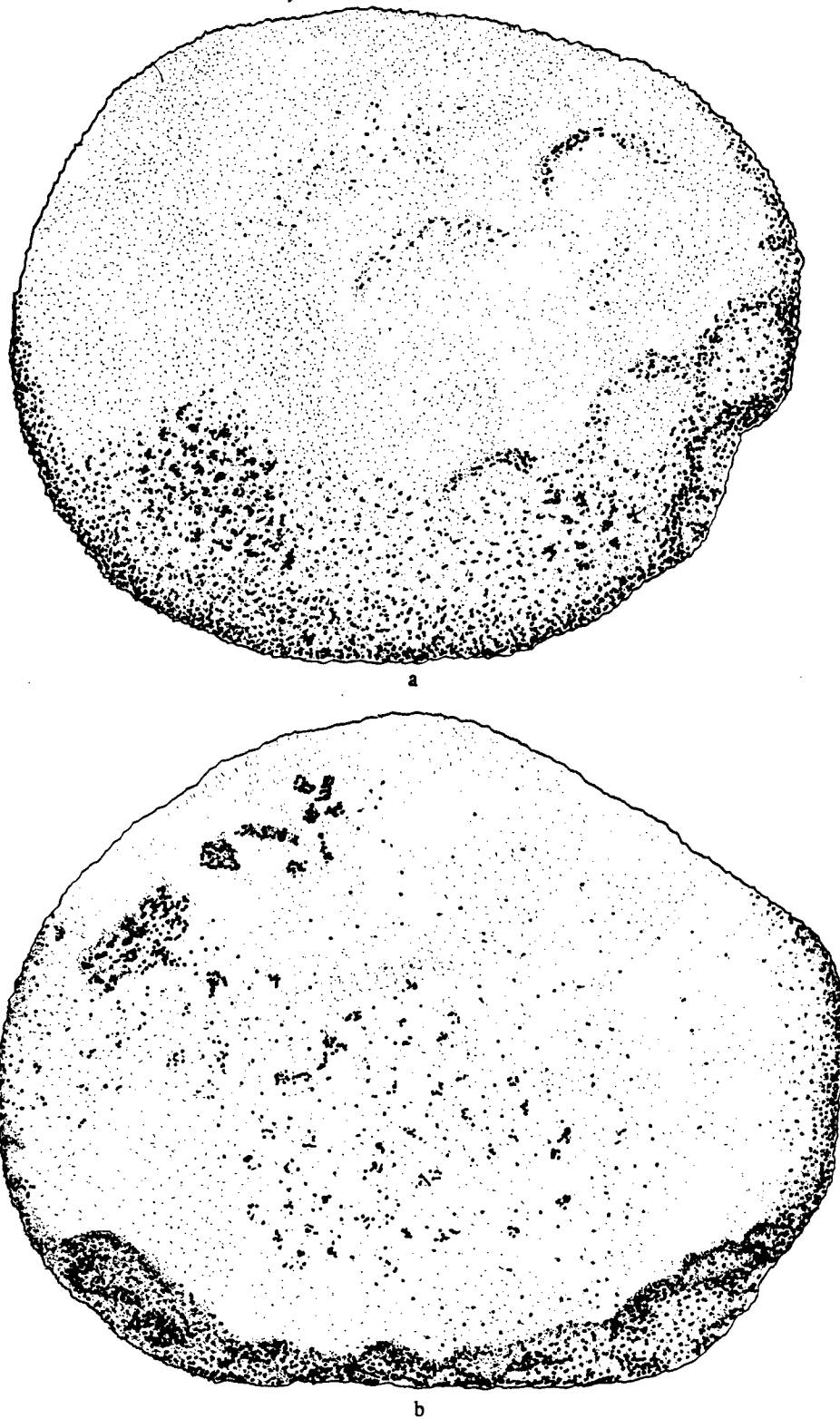


Figure 100. Diagnostic lithic artifacts recovered from 34Cm-477 (Concentration A) during the 1992 survey:
(a-b) sandstone manos.

Tools

A quartz (N7) dart point was collected from Concentration B. The tip and one shoulder of this point have been fractured and the point is fairly thick, possibly indicating abandonment of this point before completion. This artifact, which resembles a Palmillas point, measures 4.3 cm x 2.4 cm x .8 cm and weighs 7.75 g (Figure 101a).

The first of the four bifaces recovered from this concentration is a thin Ogallala quartzite biface with an oblique medial fracture. The extant fragment has a slightly convex base and parallel lateral edges. This fragment measures 2.5 cm from lateral edge to lateral edge 1.8 cm from the basal edge to the fracture, and is .5 cm thick, and weighs 2.5 g. The second biface, also of Ogallala quartzite, is a disk-shaped preform that was discarded or lost early in the reduction process. A small amount of cortex still adheres to one edge of the dorsal surface, while the ventral surface appears unmodified. This piece measures 3.5 cm x 3.0 cm x 1.3 cm and weighs 2.9 g.

The third biface is a triangular flake fragment that has one edge bifacially modified into a working edge. The other two edges are fragmented, but the shape of the remaining edge suggests that this tool may have been a biface similar in shape to the first biface discussed above. This artifact is made of a very pale brown (10YR 7/3) chert that has a medium-fine texture, dull luster, is opaque, and has shell fragment inclusions. The dimensions of this piece are 3.4 cm x 2.1 cm x .5 cm, and the weight is 2.85 g. The fourth biface is a small edge fragment of a bifacial tool. This artifact measures just 1.2 cm x 1.0 cm x .4 cm and weighs .32 g.

The only scraper recovered from Concentration B is unusual in that it was produced from a water-polished chert flake. The scraper bit is steeply chipped and unworn except for a small amount of edge wear, while the body of the chert flake and the striking platform are smoothed, presumably from fluvial action (Figure 101b). The body of the flake has a dull luster, while the cutting bit has a satin luster. The chert is very pale brown in color and has shell fragment inclusions. This chert is similar to biface three discussed above and closely matches the description of unheat-treated Kay County chert (Banks 1990:132). This artifact measures 3.5 cm x 3.0 cm x 1.1 cm and weighs 10.4 g.

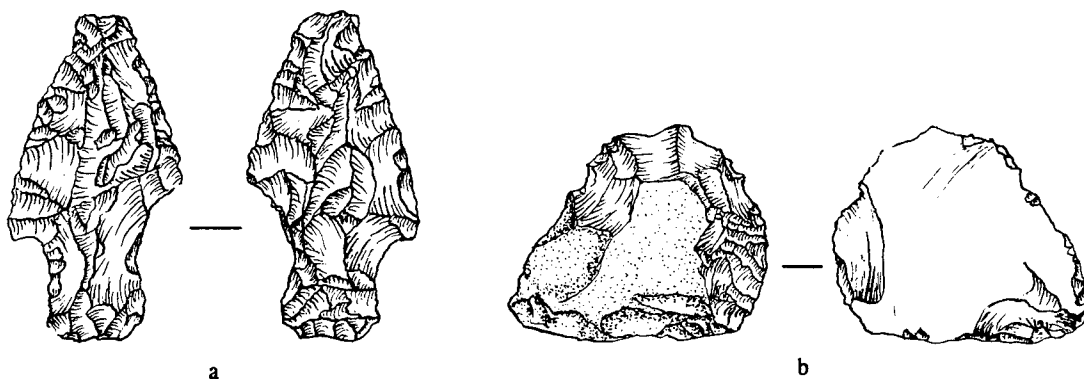


Figure 101. Diagnostic lithic artifacts recovered from 34Cm-447 (Concentration B) during the 1992 survey: (a) quartz Palmillas-like point; (b) chert end scraper. (Scale 1:1)

1992-1993 Cultural Resources Inventory: Fort Sill, Oklahoma

The last tool recovered from this area of the site is a large uniface made from an unusual variety of lithic raw material. The raw material is a nearly black rock that has quartz phenocrysts, reddish banding on one face only, a patch of light yellow brown cortex on the opposite surface, remnant bedding that runs perpendicular to the reddish banding, and a fine texture similar to chert or silicified siltstone. Suggestions that this is gneiss, gabbro, metamorphosed siltstone, or silicified siltstone have all been put forth. Three edges have been crudely flaked into a scraper-like unifacial tool, while the fourth edge has been fractured. This piece measures 4.2 cm x 3.2 cm x 1.3 cm and weighs 14.9 g.

Lithic Debris

Lithic debris recovered from Concentration B is composed of two tertiary flakes (one quartz and one chert bifacial thinning flake), 13 flake fragments, and 16 angular fragments. Including the two tertiary flakes, the raw material types consist of one Edwards chert flake, eight pieces of other cherts, 14 pieces of quartz, and eight pieces of Ogallala quartzite. The size ranges for this debris are 13 pieces between 1 and 2 cm, 17 between 2 and 3 cm, and one between 3 and 4 cm. In addition, an Ogallala quartzite core was collected, which measures 10.75 cm x 7.6 cm x 5.6 cm and weighs 551.9 g.

Faunal Material

An epiphysis fragment of a long bone was collected from the surface of this site. This fragment is 3.5 cm x 1.5 cm and is badly decomposed.

Concentration C

Two biface fragments, two utilized flakes, a metate fragment, a hammerstone, 15 pieces of lithic debris, and three pieces of bone were collected from the surface of Concentration C. No additional cultural material was observed or collected.

Tools

The tip of a dart or knife was collected from this concentration. Made from possibly heat-treated Ogallala quartzite, this fragment measures 2.4 cm x 1.8 cm x .6 cm and weighs 2.25 g.

A small fragment of a quartz biface was recovered. This artifact is only 1.7 cm x .8 cm x .7 cm and 1.1 g in weight. While it is only a small fragment of the complete artifact, this piece may be a fragment of the stem and one notch of a dart point.

Two chert flakes exhibit minor amounts of modification. The first is a mottled gray chert flake modified from utilization. The flake's measurements are 2.8 cm x 1.6 cm x .4 cm, and it weighs 1.3 g. The second item is a Tecovas-like chalcedony flake modified by both use wear and a small, shallow notch that was chipped into one edge. This tool measures 2.4 cm x 1.5 cm x .4 cm and weighs 1.2 g.

A metate fragment and a hammerstone were collected from this concentration. The metate fragment is made of a fine-grained, highly indurated siltstone. One surface is worn smooth. This fragment weighs 153.0 g and measures 7.0 cm x 4.0 cm x 3.8 cm. The hammerstone is a split cobble of metaquartzite

with battering along one edge and a fracture through its midsection. This hammerstone is composed of the same type of material as the other hammerstone recovered from this site. This item measures 6.1 cm x 3.5 cm x 1.9 cm and weighs 45.2 g.

Lithic Debris

One chert tertiary flake, five flake fragments, and nine angular fragments were collected from this concentration. This material consists of two pieces of chert, one of Ogallala quartzite, and 12 pieces of quartz. The size ranges are one piece less than 1 cm, seven between 1 and 2 cm in size, and seven between 2 and 3 cm in size.

Faunal Material

Three fragments of the pelvis of a large mammal were collected from the surface of Concentration C. All three pieces are approximately 5.5 cm long.

Concentration D

Most of the material from Concentration D is of questionable cultural origin. The items collected consist of one flake fragment and six angular fragments. The flake is of white chert and measures less than 1 cm in length. The fragments consist of five fragments of quartz and one of basalt. The quartz ranges in size from 2 to 3 cm, while the basalt fragment is between 4 and 5 cm.

Summary

This site exhibits several large, high density lithic scatters and features, and a variety of tool types. Unfortunately, this site is being impacted on a continuing basis. Both hearth features in Concentration A were destroyed by military vehicles within a short period after this site was recorded. This site is located within a firebreak and road that provides the only access to the area from the south. Preservation efforts at this site would be difficult if not impossible. While further testing is recommended to evaluate fully this site's potential for inclusion in the NRHP, additional steps to mitigate data loss are needed in the near future.

34Cm-448 (92-74)

This site consists of a low density lithic scatter located on a very deflated and eroded finger ridge extending north by northwest from the base of Mount McKinley. Small intermittent drainages are located on the eastern and western edges of the site area; soil is mapped as Lawton loam. The elevation of the site is 465 m (1,525 ft) amsl. Vegetation observed in the area of the site consisted of post oak, pecan trees, short Indian rice grass, and little bluestem grass.

An arrow point fragment, three lithic tools, and several fragments of lithic debris were collected from this site; an additional 15 pieces of debris were observed but not collected. The artifact scatter was extensive

but low in density. Eight shovel tests were excavated on the ridge, but no cultural material was observed in any test unit. Surface sediments were observed to be no greater than 18 cm in depth. Site area is estimated at 2,600 m² (Figure 102).

One of the three site locations given for previously recorded site 34Cm-128 places it at approximately this location. However, Shaeffer (1961) clearly states in his description of his excavations of 34Cm-128 that the Fort Sill boundary fence passes through site 34Cm-128. Site 34Cm-448 is located at least 500 m from the boundary fence, ruling out the possibility that site 34Cm-448 is the original 34Cm-128.

Prehistoric Artifacts

An arrow point fragment, end scraper, biface fragment, utilized flake, and four pieces of lithic debris were collected from the surface of this site. Observed on the ground surface but not collected was lithic debris consisting of basalt, quartz, Ogallala quartzite, and white and gray chert flakes and fragments.

The stem and one shoulder of the arrow point fragment were broken, possibly during manufacture (Figure 103a). The extant blade measures 1.95 cm x 1.1 cm x .26 cm and weighs .45 g. The raw material is a pinkish gray (10YR 7/2) chert with a patch of reddish brown that may be the remnant of the cortex. This chert is opaque, medium-textured, with a dull luster and microscopic vug inclusions.

The Alibates (5R 7/4) chert end scraper was made on a large flake measuring 3.2 cm x 2.6 cm x .7 cm (Figure 103b). The dorsal surface has been steeply chipped on the distal end and the lateral edges, while the proximal end appears to have been crudely trimmed to facilitate hafting. A large portion of the distal end has been fractured, making an estimate of use wear impossible.

The biface fragment is of Ogallala quartzite and was abandoned early in the manufacturing process. This item measures 2.7 cm x 2.2 cm, is 1.0 cm thick and weighs 6.1 g. The quartzite is fine-grained, medium gray with a slight reddish coloration on one edge, possibly indicating heat treating.

The utilized flake is an obsidian fragment with modification on the one remaining intact edge; this modification appears to be the result of utilization. The obsidian is transparent with a slight gray tint. The flake measures 1.8 cm x 1.7 cm x .4 cm and weighs 1.3 g.

Lithic debris consists of a quartz crystal flake with the dorsal surface formed by the crystal facets, an Ogallala quartzite flake fragment, a quartz flake fragment, and a flake fragment of very pale brown chert. Size ranges for this sample are: one piece between 1 and 2 cm, two between 2 and 3 cm, and one piece between 3 and 4 cm in size.

Summary

The 34Cm-448 site area has been extensively eroded and disturbed by military bivouacs and military vehicles, density of cultural material is low, and no in situ archeological deposits were observed or expected. No further work is recommended at this site, and it is not recommended for inclusion in the NRHP.

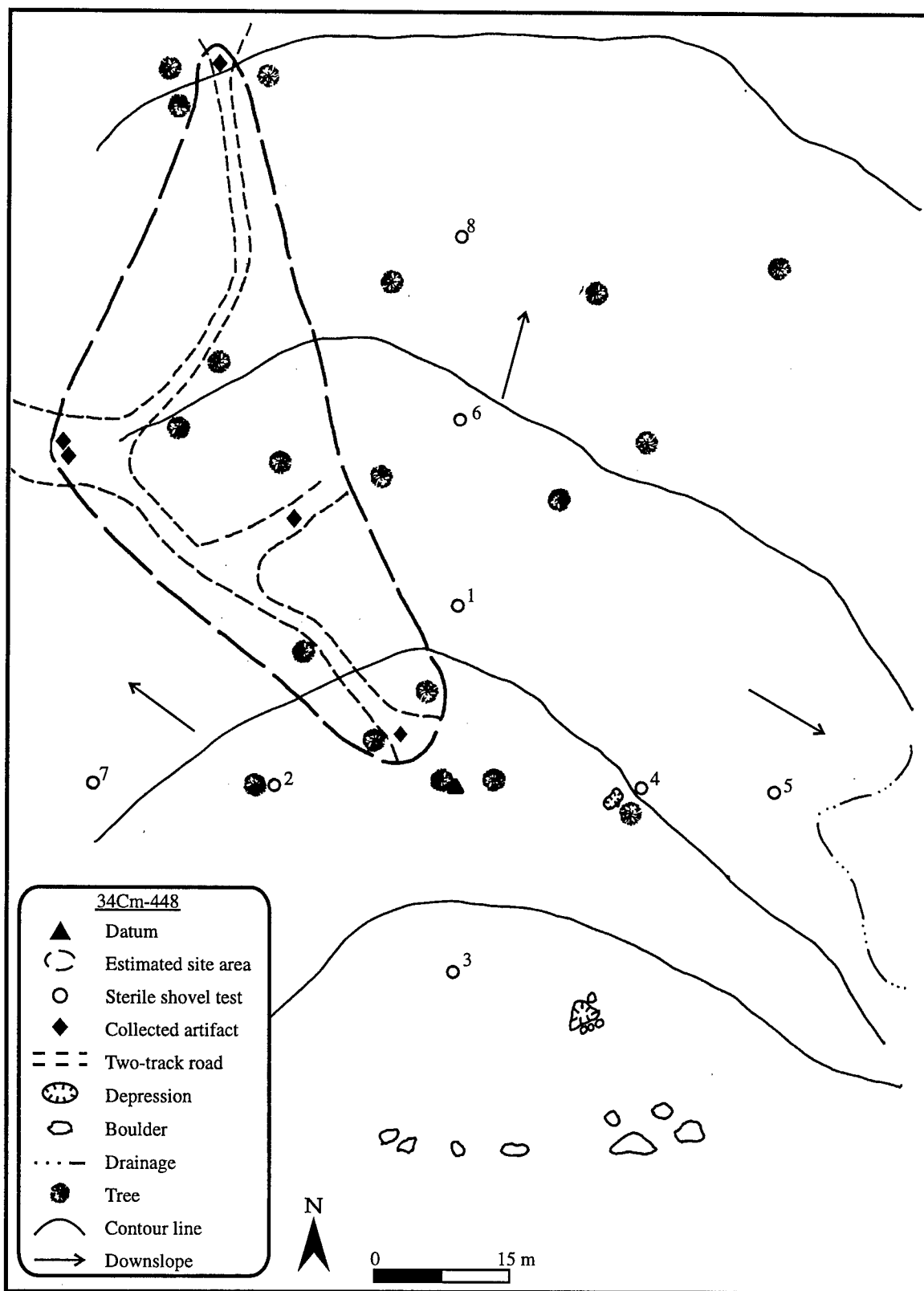


Figure 102. Plan map of site 34Cm-448 (92-74).



Figure 103. Diagnostic lithic artifacts recovered from 34Cm-448 during the 1992 survey: (a) chert arrow point; (b) Alibates chert end scraper. (Scale 1:1)

34Cm-303 (92-88)

This site was recorded by the Museum of the Great Plains as a moderately extensive prehistoric site dating to the Plains Village period with a high to very high density of artifacts observed and 73 lithic artifacts collected. Heavy disturbance to the site from military activities was observed at that time.

The site area is situated east of Crater Creek, south of Fern Mountain. The eastern boundary of the site slopes steeply to the valley between Fern Mountain and Mount McKinley, while a small drainage runs to the west of the site. Soil within the current site limits is rock land; however, the original site boundaries extended south into an area of granite cobbly land. Site elevation is 460 m (1,510 ft) amsl. Vegetation in this area is dispersed blackjack oaks with a mixed grass ground cover. A more dense stand of blackjack oaks is found at the base of Fern Mountain, while larger post oaks are located along Crater Creek and some of its tributaries.

A thorough inspection of the site area resulted in the relocation of a very small amount of lithic debris. Only two artifacts were observed on the surface of this site, a quartz flake at the foot of the granite outliers of Fern Mountain, and a quartz shatter fragment next to Shovel Test 1. Six shovel tests were excavated in this area, with one unit yielding a single quartz flake. Fifty meters south of these two items a fragment of a leg bone from a medium-sized mammal was observed within a small upland drainage. No artifacts were associated with this faunal material. Site area is estimated at 500 m² (Figure 104).

The current site location is north and east of the previously reported location for site 34Cm-303; however, the entire area on the south side of Fern Mountain was investigated, and this location was the only area that contained any prehistoric material. Since erosion and military training activities have removed much of the vegetation over large portions of this area, GMI personnel are confident that no surficial prehistoric material was overlooked in this area.

Prehistoric Artifacts

One quartz flake fragment and a bone fragment were collected from the surface of this site and one quartz flake was recovered from a shovel test.

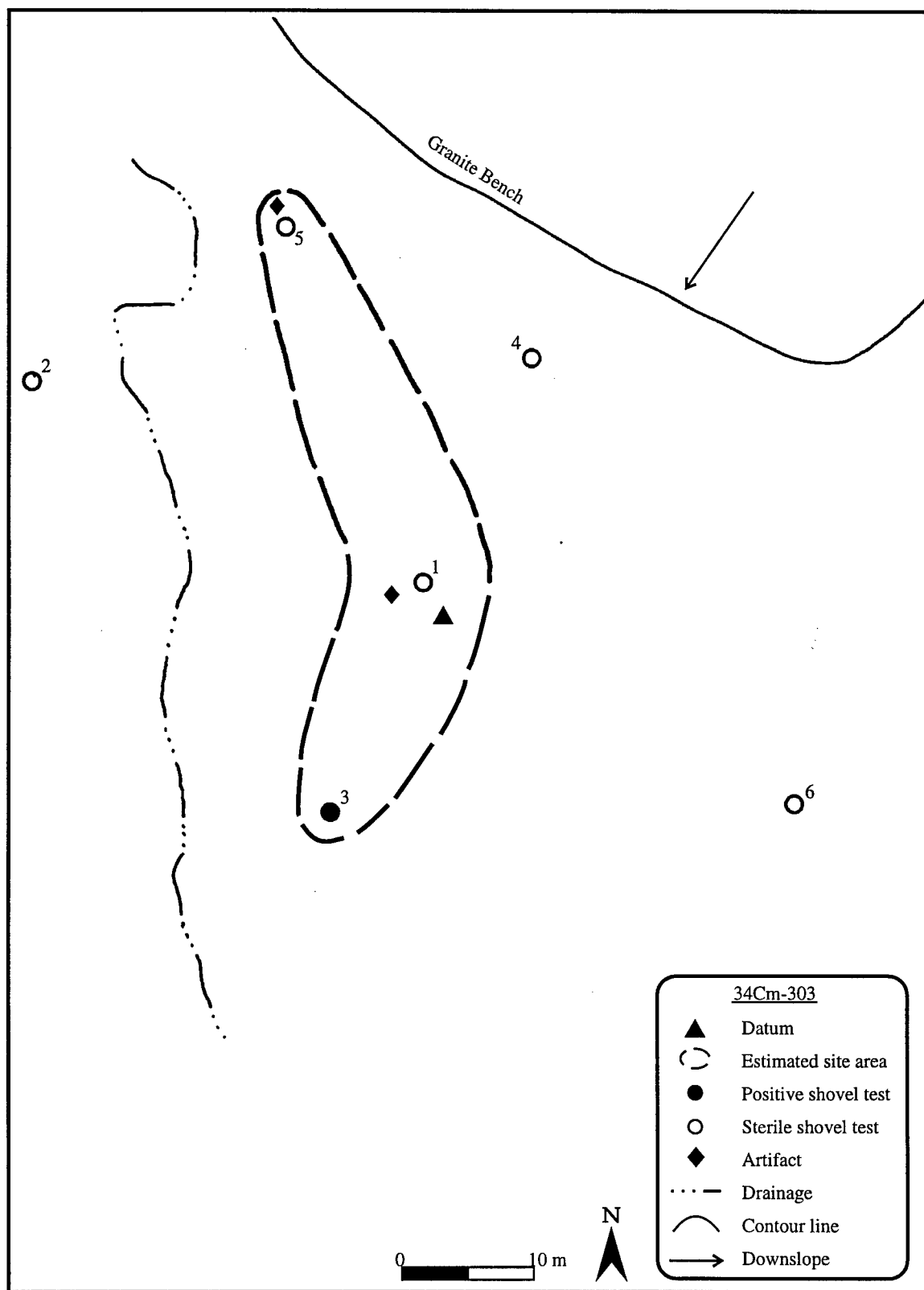


Figure 104. Plan map of site 34Cm-303 (92-88).

Surface

The flake collected from the surface measures 2.7 cm in length, and shows no evidence of modification or utilization.

Faunal Material

The bone fragment is 1.7 cm x .6 cm x .4 cm and weighs .3 g. This piece of faunal material does not exhibit any evidence of having been culturally modified.

Shovel Test 3, Level 1 (0 to 20 cm bs)

A quartz flake fragment measuring 1.2 cm in length was recovered from the first level of this test unit. There is no evidence of modification or utilization of this flake.

Summary

Site 34Cm-303 is marked by a scatter of empty rifle cartridges, MRE packaging, and communication wire within the site area; foxholes encircle the site in a standard military defensive formation, indicating that this area has been used as an observation or field command post. This activity has resulted in extensive erosion to the site.

Only a minimal amount of material was observed for this site; in addition, the site exhibits a high degree of disturbance, with little evidence that significant intact archeological deposits remain. No further work is recommended, and the site is not recommended for inclusion in the NRHP.

34Cm-458 (92-89)

This site represents a moderate density prehistoric site located at the western base of Fern Mountain, on a small knoll that was created by the confluence of two intermittent drainages. These drainages flow into Crater Creek, located downslope to the northwest. The soil in the site area is mapped as rock land, while breaks-alluvial land complex is located downslope and granite outcrop upslope. The elevation of the site is 448 m (1,470 ft) amsl.

Quartz flakes were initially observed on the ground surface of this site. Six shovel tests were excavated, resulting in the recovery of additional cultural material in three test units. All the artifacts consist of undifferentiated lithic debris, with the exception of two marginally modified quartz flakes. Site area is estimated at 450 m² (Figure 105).

The area is densely covered by a thick stand of blackjack oaks and has a ground cover consisting of grasses, small bushes, and low-growing vines. The overgrowth and leaf debris obscure 95 percent of the ground surface. The site itself was discovered due to the necessity of crawling through the dense vegetation to cross the knoll. Although survey in this area is quite difficult, the heavy cover has served to protect this site. This site is small, but it is one of the best-preserved upland sites located at Fort Sill.

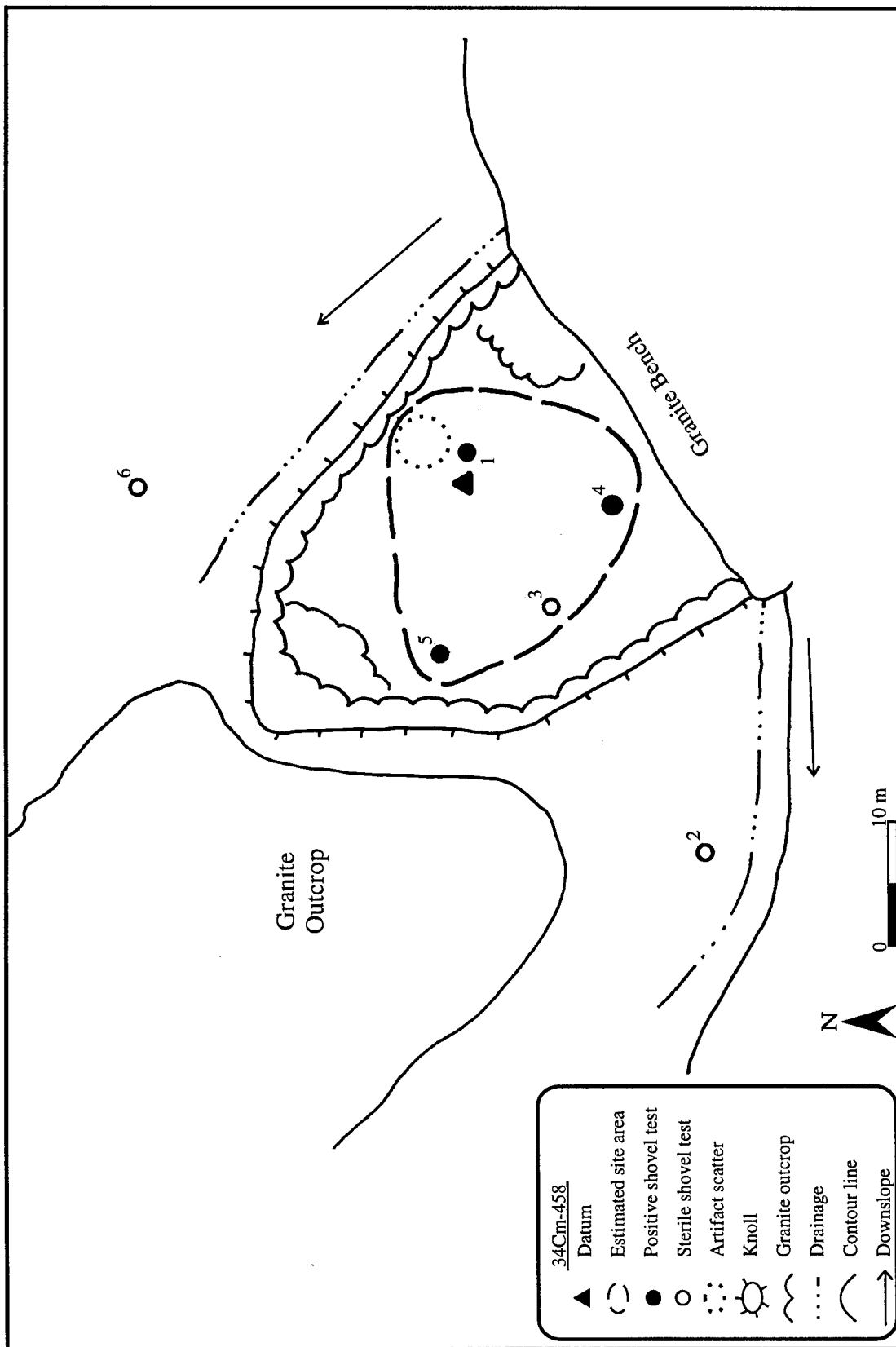


Figure 105. Plan map of site 34Cm-458 (92-89).

Prehistoric Artifacts

Of the 30 unmodified flakes and two modified flakes recovered from this site, 11 were found on the surface; the remainder were collected from Shovel Tests 1, 4, and 5. Most of the artifacts, including the modified flakes, are made of quartz; however, other raw material includes quartzite and chert. No features were observed at this location.

Summary

While this site is very small, it exhibits one of the highest concentrations of artifacts per square meter of any prehistoric site in the area. Because of minimal disturbance to this site, subsurface archeological deposits likely are intact. Shovel test results support this conclusion. Further testing is recommended to evaluate fully the site's potential for inclusion in the NRHP.

34Cm-459 (92-90)

This site consists of a low density lithic scatter extending for 160 m along the Fort Sill boundary firebreak. The scatter is centered on the crest of a slope that leads down to a small intermittent tributary of Crater Creek. Soil in this area is mapped as rock land, while breaks-alluvial land complex is noted downslope. Site elevation is 445 m (1,460 ft) amsl. The area east of the site slopes up to the foot of the Wichita Mountains; this area is characterized by broad meadows of mixed grasses and dense stands of post oak and blackjack oak. On the mountains, blackjack oaks are mixed in with the boulders and granite outcrops.

A very low density lithic artifact scatter, including a single dart point, was observed within the firebreak. Lithic raw materials consisted of chert and quartz. Six shovel tests were excavated on the eastern side of the firebreak, with no cultural material recovered in any of these tests. No examination of the area west of the firebreak was conducted, leaving the possibility that the site extends west into the Wichita Mountains Wildlife Refuge. All cultural material observed was lithic debris except for a quartz Palmillas-like dart point, suggesting a Late Archaic date of occupation. The site area is approximately 3,200 m² (Figure 106).

Although a historic canning lid fragment was observed within the site area, the site is not considered to be multicomponent based on the occurrence of this single historic item since historic material of both military and civilian origin can be found in low to moderate densities in all areas of the military reservation. Historic material is found on all but a few prehistoric sites, but generally is of recent origin.

Prehistoric Artifacts

One quartz projectile point was collected from the surface of this site; four chert flakes, two quartz flakes, five quartz angular fragments, and one canning lid fragment were observed on the ground surface but not collected.

The point is a Palmillas-like dart point of smokey gray (N6) quartz (Figure 107). This is a finely made, nearly complete point with only the distal 3 to 4 mm of the tip missing. This artifact measures 4.0 cm x 2.3 cm x .8 cm and weighs 7.35 g.

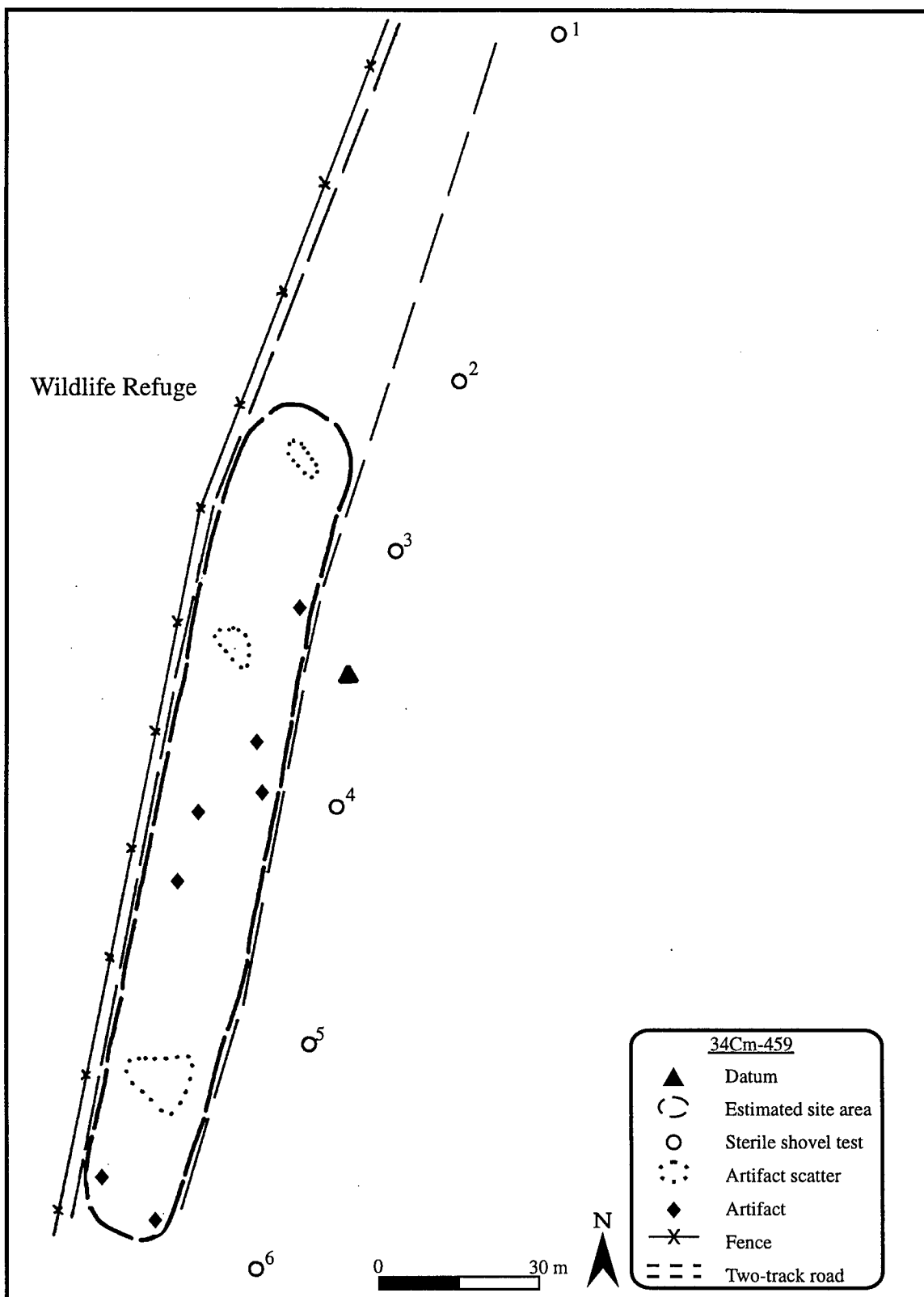


Figure 106. Plan map of site 34Cm-459 (92-90).

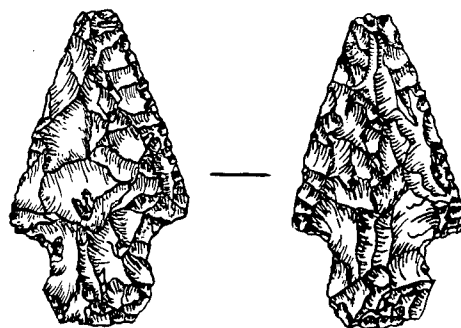


Figure 107. Diagnostic lithic artifact recovered from 34Cm-459 during the 1992 survey: quartz Palmillas-like dart point. (Scale 1:1)

Summary

Very little cultural material remains in the site area that lies within the Fort Sill Military Reservation boundary; whether or not any material or undisturbed archeological deposits exist west of the fort boundary fence is not known. No further work is recommended for the portion of this site known to exist within the boundary of Fort Sill. However, no recommendation for this site's potential for inclusion in the NRHP can be made without testing within the Wichita Mountains Wildlife Refuge.

34Cm-463 (92-95)

This site consists of a low density lithic scatter located atop a low knoll between two small drainages. The site lies within the stand of large post oaks that encircles the northern base of Mount McKinley. Soil in this area is mapped as Lawton loam; site elevation is 460 m (1,510 ft) amsl. Besides post oak, there is very little vegetation within the site area itself, although large open areas containing mixed grasses are visible north of the site.

A small scatter of lithic artifacts was observed in the severely eroded portions of 34Cm-463. A projectile point, an end scraper, and six pieces of lithic debris were collected. Ten shovel tests were excavated at the site, with no subsurface material recovered. Site area is estimated at 1,250 m² (Figure 108).

The knoll on which the site is located retains little soil or surface vegetation because of erosion created by military traffic and training in the main site area. The northernmost portion of the site is also being disturbed by military traffic on an improved but deeply rutted dirt road, while off-road traffic has removed all vegetation and most sediments from the southern portion of the site. A dense scatter of tin cans, plastic soda bottles, a trip wire with cans tied to it, rifle cartridges, camouflage netting, MRE packaging, and other military-related trash was observed within the site boundaries.

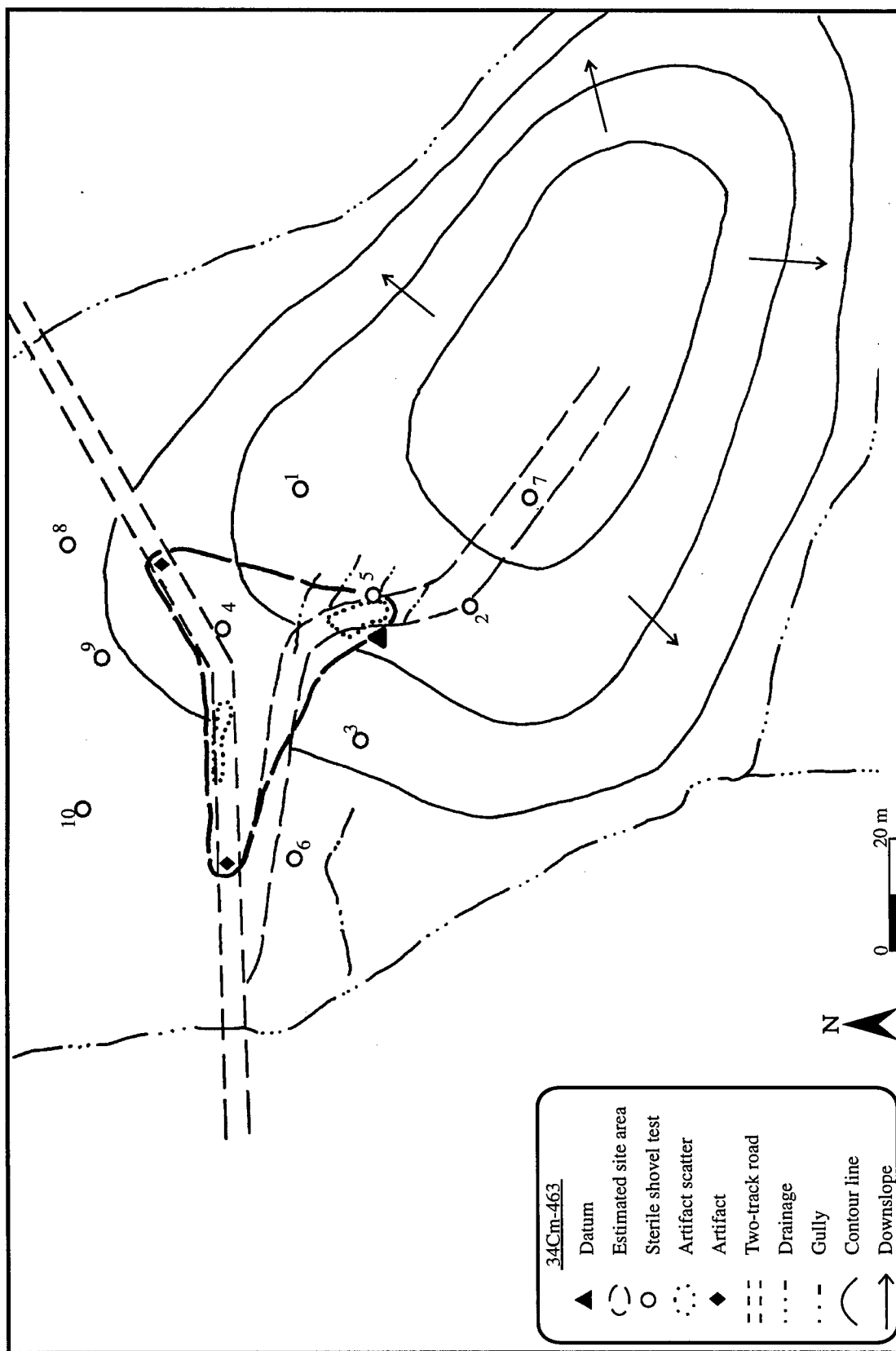


Figure 108. Plan map of site 34Cm-463 (92-95).

Prehistoric Artifacts

A Paleo-Indian point, a modified chert pebble, and six pieces of lithic debris comprise the lithic assemblage collected from this site. Three quartz flakes and angular fragments were the only other material observed at this site.

Tools

The Paleo-Indian projectile point (Figure 109a) is of Alibates (5YR 8/1) chert. This artifact has a roughly parallel-sided stem with a concave base and a beveled, triangular blade. The sides of the stem have been ground; the concave base has been thinned on one face by two shallow flutes but has not been ground. The right lateral edge of each face of the blade has been strongly beveled and appears to have been extensively resharpened. This specimen most closely resembles the Dalton point style. The dimensions of this tool are: length - 2.8 cm, width - 1.9 cm, thickness - .5 cm; the weight is 3.5 g.

Other than the point, the only tool from this site is a marginally modified chert pebble (Figure 109b). This tool has had several flakes removed from opposing faces, creating a wedge. The resulting chisel-like edge has a number of small flakes and step fractures along its margin, the result of use rather than of intentional trimming or retouch. The raw material is very dark brown (10YR 2/2) chert with a fine texture, semi-glossy luster, and translucency to 2.5 mm. The specimen, which weighs 8.6 g, is 2.65 cm long, 2.3 cm wide, and 1.2 cm thick.

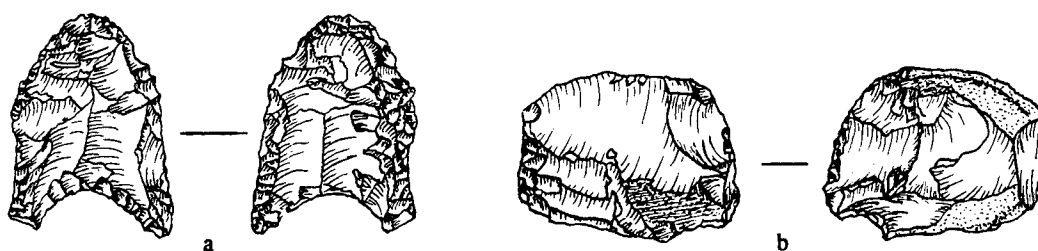


Figure 109. Diagnostic lithic artifacts recovered from 34Cm-463 during the 1992 survey: (a) Alibates chert Dalton-like dart point; (b) modified chert pebble. (Scale 1:1)

Lithic Debris

The lithic debris collected from this site includes the proximal end of a large primary chert flake, three flake fragments, and three angular fragments. Four pieces of this debris range in size from 2 to 3 cm and three pieces measure between 3 and 4 cm in size. The raw materials include one flake each of chert, rhyolite, and quartz; and one angular fragment of Ogallala and two of quartz.

Summary

This site has been so severely impacted by military activity that no significant cultural deposits can be expected to remain at this location. Despite its assumed Paleo-Indian component, no further work is recommended for this site, and it is not recommended for inclusion in the NRHP.

34Cm-468 (92-102)

This site represents the remains of a historic farmstead located at the northern base of Mount McKinley. Small intermittent drainages run along the eastern and northern edges of the site. The ground surface behind the farmyard rises steeply; elevation of the site is 460 m (1,510 ft) amsl. Soil in this area is mapped as Lawton loam. Vegetation observed in the area of the site consisted of post oak, blackjack oak, black walnut, sumac, mixed grasses, and wildflowers.

The features at this site consist of a concrete-and-cobble building foundation (Feature 1); a chimney fall and small concrete slab 15 m northwest of the main foundation (Feature 2, possibly the location of a second structure,); a cistern/well 10 m north of the chimney (Feature 3); a cement trough and slab 60 m west of the main foundation (Feature 4); and a circular wire enclosure (averaging 15 m in diameter) between the other features (Feature 5; Figure 110). The main foundation is covered with military sand bags.

Historic artifacts, including glass, ceramics, and crockery, were observed in the drainages that border the site. Thirteen shovel tests were excavated at this site, with seven test units yielding metal fragments, glass, and nails to a depth of 20 cm bs. Recent military trash was also observed in the site area, which is estimated to cover approximately 6,400 m².

A second concentration of features is located approximately 60 m south of the main site area (not shown). This area includes a low cobble wall and a fragmented concrete slab. Artifacts associated with these features include a low wooden table, a tin can, and glass fragments. The latter concentration of features is believed to be military in nature (and thus essentially modern), and was not recorded as part of the site. Both site areas are within the property boundaries of the parcel that was acquired by the Army after 1940.

Historic Artifacts

Seven positive shovel tests were excavated at this site. Wire nails (1880-1990) and a cut nail (1840-1900) were the only diagnostic historic materials recovered from the shovel tests.

Summary

This site retains intact features and buried archeological deposits. Further testing as well as additional archival research is recommended to evaluate fully this site's potential for inclusion in the NRHP.

34Cm-469 (92-103)

Both prehistoric and historic materials were observed on the steep slope and foot of a bench located at the northern base of Mount McKinley. Soil in this area is mapped as stony rock land, and site elevation is recorded as 472 m (1,549 ft) amsl. Vegetation observed in the area of the site consisted of oak, sumac, mixed grasses, and wildflowers.

This site exhibits a very low density of artifacts. Four flakes, four angular fragments, two glass fragments, one historic ceramic fragment, and a scatter of recent military trash were observed on the ground surface at this site. Six shovel tests were excavated at the site, with one yielding a quartzite flake at a depth of

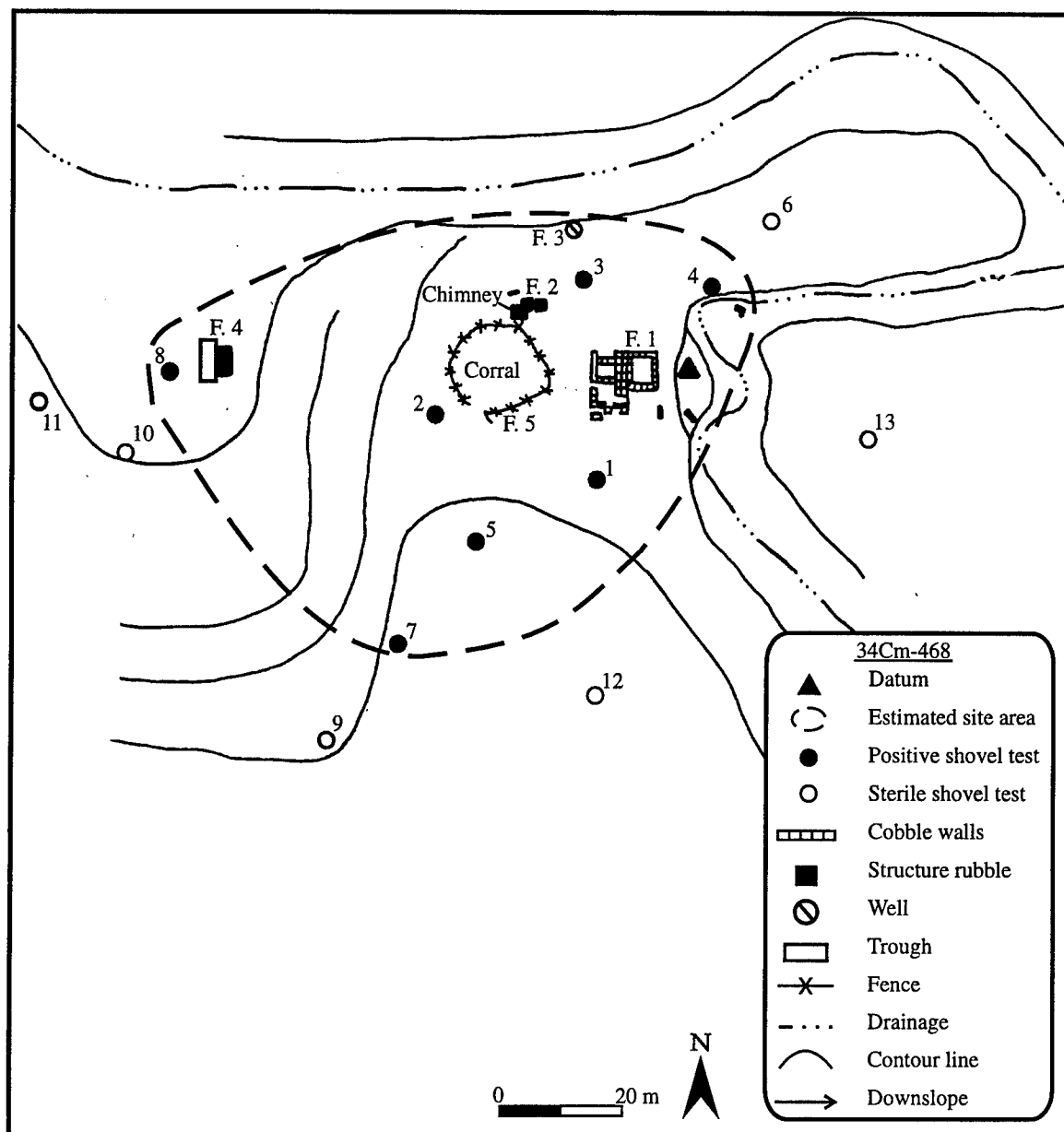


Figure 110. Plan map of site 34Cm-468 (92-102).

7 cm. The depth of surface sediments observed was from 2 cm to 7 cm, with the exception of one test that reached 20 cm bs. Site area is estimated at 1,800 m² (Figure 111).

Prehistoric Artifacts

The artifact assemblage collected from this site consists of one flake fragment and four angular fragments from the surface and one flake fragment recovered from a shovel test. A small amount of additional lithic debris was observed on the ground surface but was not collected.

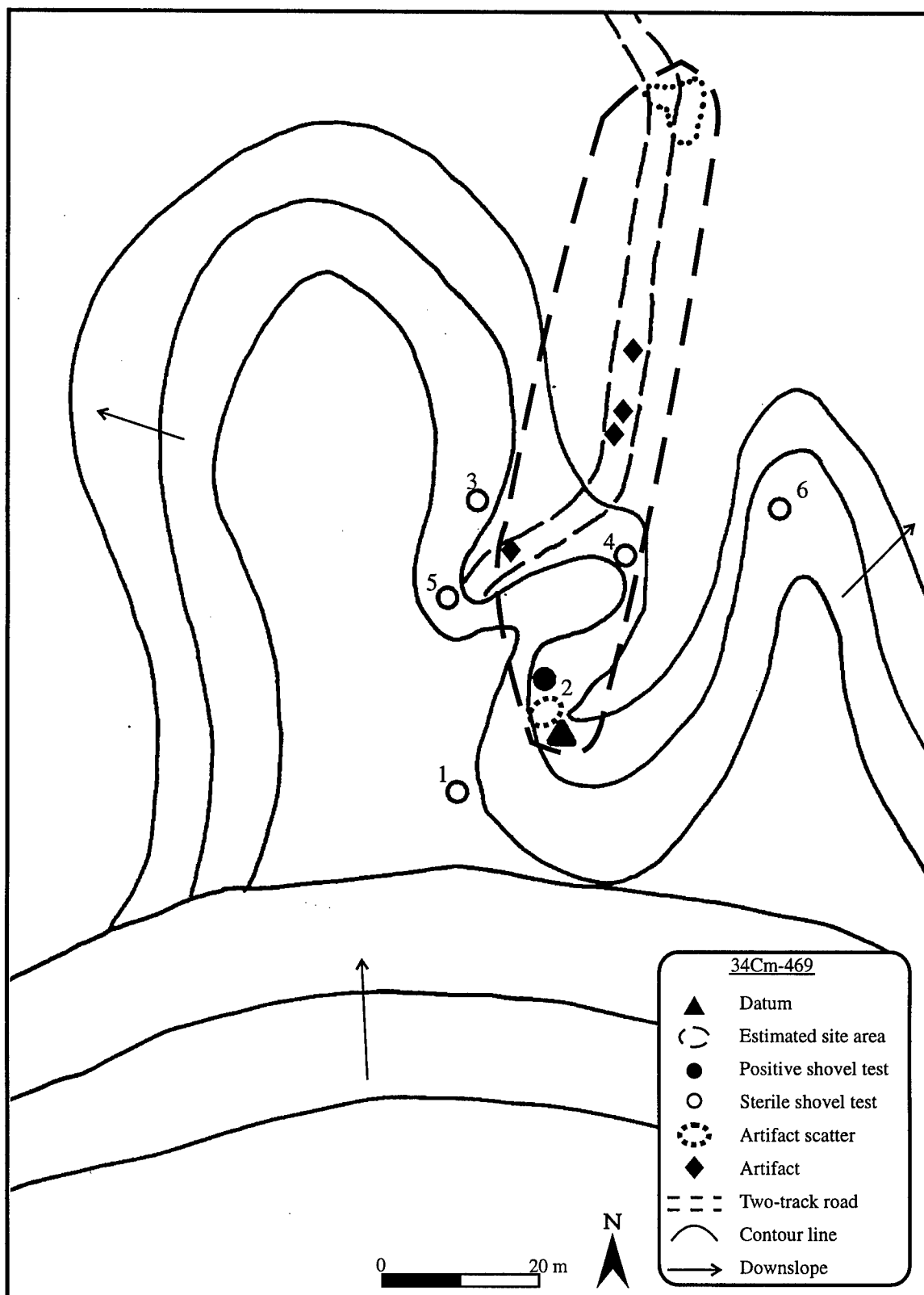


Figure 111. Plan map of site 34Cm-469 (92-103).

1992-1993 Cultural Resources Inventory: Fort Sill, Oklahoma

Surface

A flake fragment of pinkish gray (7.5YR 7/3) chert was collected from the surface. This specimen exhibits a dull luster, fine texture, and is opaque. Numerous pot lid fractures on both faces indicate exposure to extreme heat. This flake falls into the 1 to 2 cm size range.

The four angular fragments, all of questionable cultural origin, consist of three quartz pieces and one basalt piece. The size range of this material is from 2.0 cm to 4.0 cm.

Shovel Test 2, Level 1 (0 to 20 cm bs)

This test unit yielded an Ogallala quartzite flake fragment. This item is the medial section of a thin flake that falls into the 1 to 2 cm size range.

Historic Artifacts

One hand-finished bottle lip/neck of solarized amethyst glass (1880-1920) was collected from the surface.

Summary

This area has been impacted by recent military activity. The area is littered with tin cans, aluminum cans, MRE packaging, communication wire, and insecticide cans. A latrine shack has been placed near the site, and foxholes have been dug in the vicinity. There is very little artifactual material and little evidence of significant or extensive archeological deposits. No further work is recommended for this site, and it is not recommended for inclusion in the NRHP.

34Cm-497 (92-137): Craterville Park - Cabin Three

This site contains the foundation of a structure believed to date to the period when Craterville was an amusement park. The foundation is located on the east bank of Crater Creek within the Non-Commissioned Officer (NCO) Academy's grounds. Soil at this location is mapped as Port loam, while the site elevation is 411 m (1,350 ft) amsl. Vegetation observed in the area of the site consisted of post oak, juniper, hackberry, long stem bunch grass, mixed grasses, poison ivy, and greenbrier.

The site contains a 6-x-8-m pier-and-beam foundation. The foundation walls are thick concrete (35 cm) with steel reinforcement. The interior of the foundation is filled with loose granite cobbles and boulders. On the south side of the foundation is a 3-x-7-m slab made of poured concrete and granite cobbles without steel reinforcement. On the east side is a concrete slab platform with double steps. A light scatter of glass and ceramic artifacts extends northwest from the foundation to a granite outcropping with boulders 2.5 in. in height.

Due to disturbance on all four sides of this structure, only two shovel tests were excavated: one to the east and one to the west. Both tests were sterile. The moderately deep sediments are compact sandy silt. Site area is estimated at 750 m² (Figure 112).

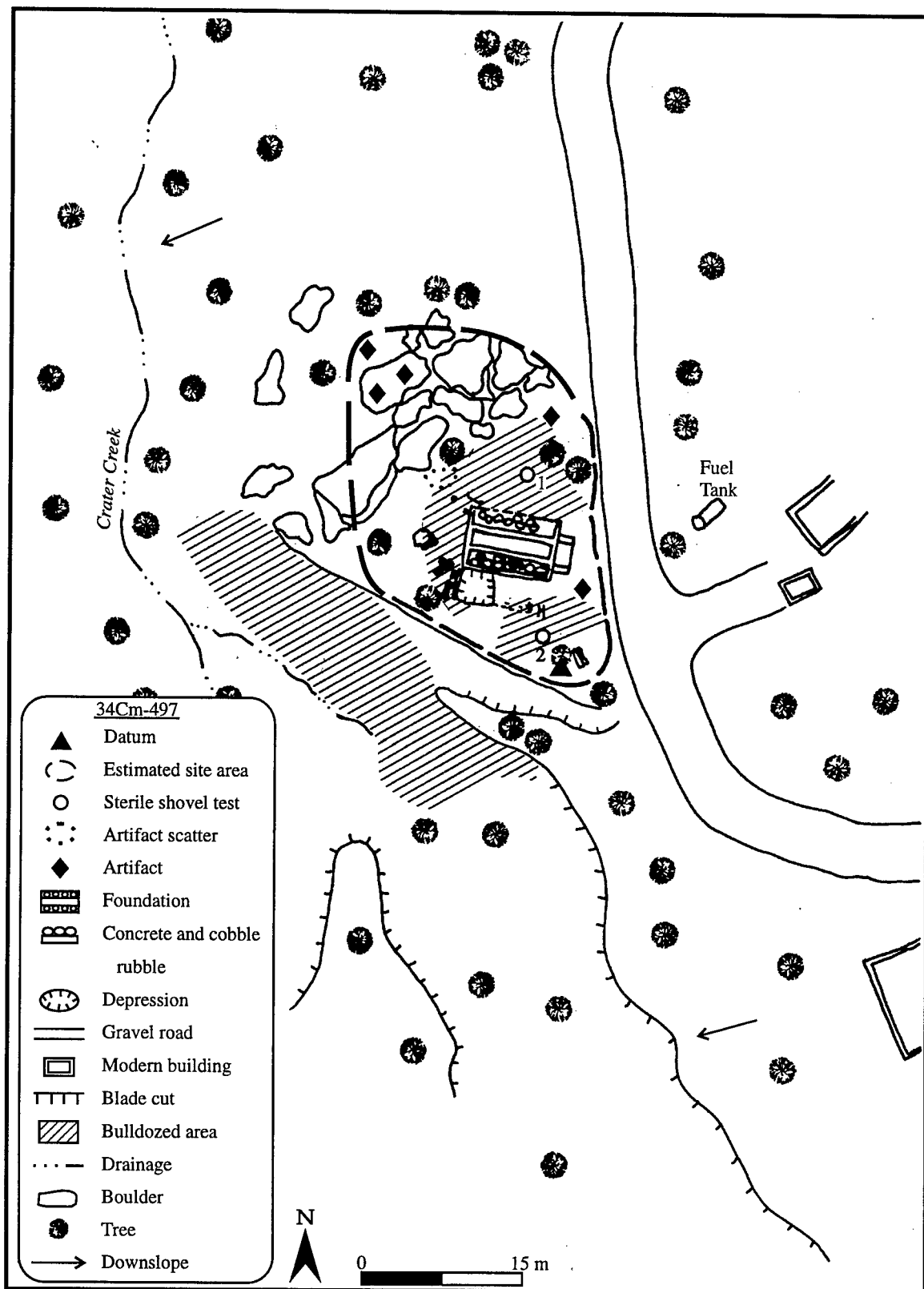


Figure 112. Plan map of site 34Cm-497 (92-137): Craterville Park - Cabin Three.

1992-1993 Cultural Resources Inventory: Fort Sill, Oklahoma

Historic Artifacts

Cultural material was recovered only from the surface. Diagnostic artifacts consist of four ivory tint whiteware fragments (1890-1990), a Boyd's opaque milk glass liner fragment (1900-1950), a light green milk glass fragment (1920-1950), and eight cobalt glass fragments.

Summary

This foundation is located within the area currently being used as the Noncommissioned Officers Training Academy. Concrete block barracks were recently constructed immediately to the east of this site, resulting in disturbance to a wide area. This construction area was surveyed by Louis Voge, Fort Sill archeologist, before construction commenced. No material or features were observed at that time. No further testing is expected to be necessary at this location, but further archival research will be needed to evaluate fully this site's potential for the NRHP.

34Cm-503 (92-146): Craterville Park - Boy Scout Camp

This site is situated on the western side of Crater Creek, within the former site of Craterville Park. The site represents the location of a large, dormitory type structure used by the Boy Scouts. This structure was constructed within an area that has soil mapped as Port loam on the south, stony rock land on the north, and granite cobbly land in the center. Observation of the site area indicates that the surface sediments at the building location are Port loam. Elevation of the site is 411 m (1,350 ft) amsl. Vegetation observed in the area of the site consisted of blackjack oak, post oak, juniper, box elder, sumac, pecan, ash, Johnson grass, ragweed, long stem bunch grass, goldenrod, greenbrier, and grape vines. The site covers some 1,000 m².

The only feature at this site believed to have been associated with the Boy Scout Camp is a concrete-and-granite-cobble well. Its dimensions are 2 m by 3 m, with an above-ground height of 1 m. Atop the well is a steel bar frame, with two hooks attached that may have been for hanging a sign (Figure 113).

Also present at the site is a large scatter of broken concrete and two modern concrete slabs that lie northwest of the well; they are not believed to have been associated with the Scout camp. The slabs, each measuring 5 m x 12 m with a raised lip, likely are firing points. A 90-cm diameter concrete cistern with a metal sewer lid, very likely a military feature as well, was also noted near the site.

Five shovel tests were excavated at the site. Only one test was positive, yielding a single fragment of mirror glass.

Summary

This site has very little cultural material present; indeed, it would not even have been recorded if archival research had not indicated that the Boy Scout Camp was located at this site. Further testing is not recommended, but additional archival research is recommended to evaluate this site's potential for inclusion in the NRHP.

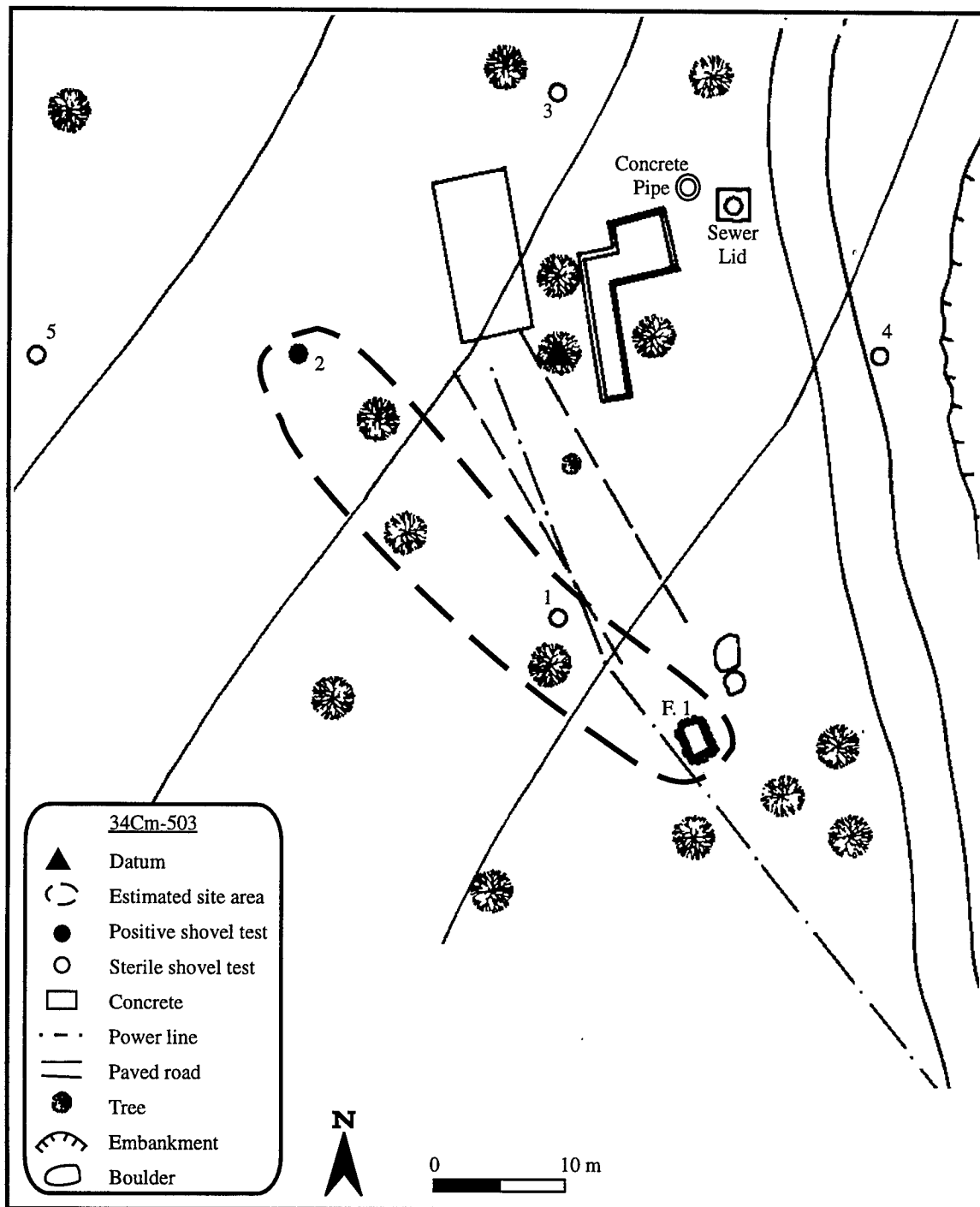


Figure 113. Plan map of site 34Cm-503 (92-146).

Survey Area 7

Survey Area 7 is located at the western edge of the North Arbuckle Range Impact Area. Totalling 1,111 acres, this area consists of level to gently rolling plains (Figure 114). Unlike the areas west of East Cache Creek, sedimentary rocks are found in this area, with sandstone and mudstone conglomerate or shale and sandstone forming the near-surface bedrock.

The soils in this area are primarily Zaneis loam and Zaneis-Slickspots complex, although small areas of Lucien-Zaneis-Vernon complex can be found in the northern portion of this survey area and Tillman clay loam can be found on the south. Port loam and broken alluvial land are located along Beef and Frisco creeks, the two major drainages in the area.

Although no sites have been previously recorded, one ruin is known to exist in this survey area. The ruin, which was not rerecorded, consisted of the remains of a small wooden bridge. The three new sites identified in this area were recorded as historic site 34Cm-456 and prehistoric sites 34Cm-452 and 34Cm-457.

34Cm-452 (92-78)

Site 34Cm-452 consists of a lithic scatter located on a heavily eroded and dissected upland slope north of Beef Creek. Soil in this area is mapped as Zaneis-Slickspots complex; elevation of the site is 360 m (1,180 ft) amsl. A sparse vegetative cover of grass was observed at the site, with sumac, dogwood, elm, hackberry, long stem bunch grass, milkweed, goldenrod, and black-eyed Susan covering the less eroded surfaces along the upland drainage west of the site area.

The site consists of a low density scatter of lithic debris with no tools or diagnostics artifacts. Most of the material observed was of Ogallala quartzite. Seven shovel tests were excavated; all failed to yield cultural material. The maximum depth of surface sediments observed was 18 cm in the eastern portion of the site area; the southwest portion of the site area has been eroded to clay subsoil. Site area is estimated at 5,700 m² (Figure 115).

Prehistoric Artifacts

Eight pieces of lithic debris were collected from the surface of this site. Additional flakes and fragments of Ogallala quartzite and chert and a core of Ogallala quartzite were observed on the ground surface, but were not collected.

Debris of Ogallala quartzite consists of a large primary flake, two secondary flakes, a flake fragment, and an angular fragment. This sample ranged in size from 2.3 cm to 4.5 cm in length and from 1.4 g to 15.1 g. A sixth item is a broken flake of silicified sandstone measuring 1.8 cm long and weighing 1.2 g. Additionally, a tertiary flake of Alibates chert in the 2 to 3 cm size range and a broken flake of slightly mottled very pale brown (10YR 8/2) chert falling into the 1 to 2 cm range were collected. This second piece of chert has a fine texture, satin luster, and translucency to 2 mm.

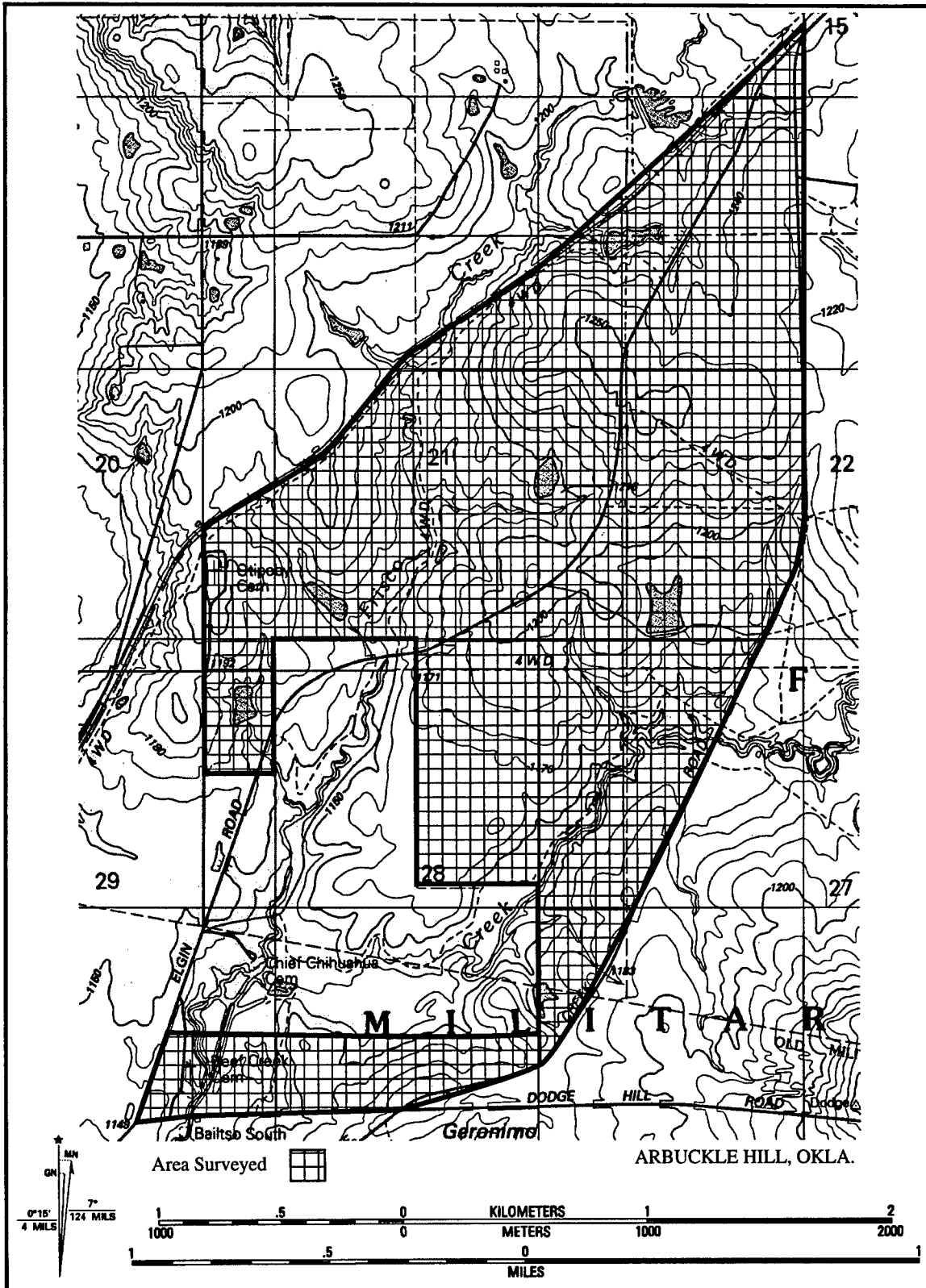


Figure 114. Location of Survey Area 7 within the Fort Sill Military Reservation.

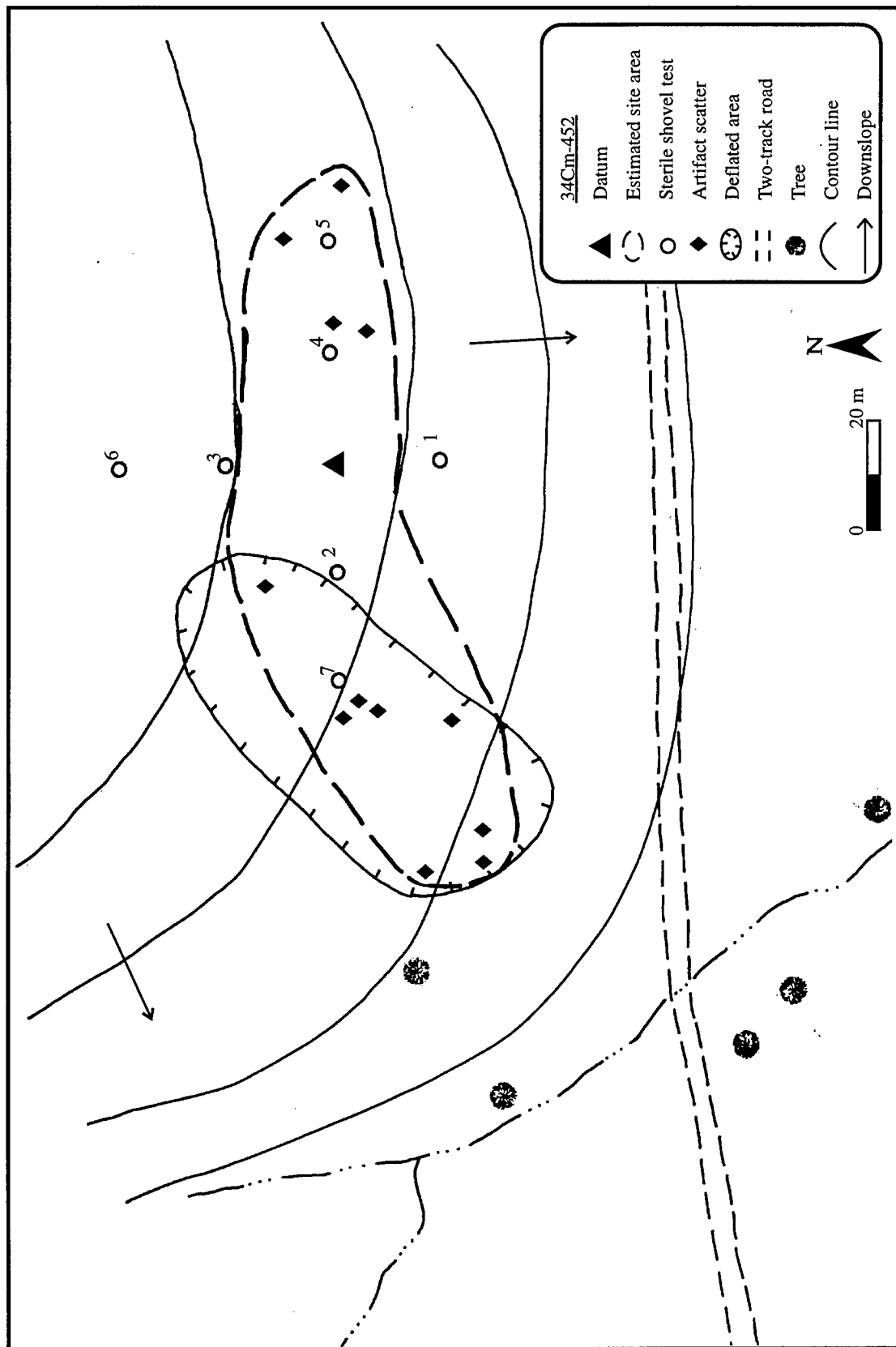


Figure 115. Plan map of site 34Cm-452 (92-78).

Summary

This site consists of a low density lithic scatter with no evidence of buried archeological deposits. No further testing is recommended nor is this site recommended for inclusion in the NRHP.

34Cm-456 (92-86)

This site is a historic farmstead located on the crest and southeast slope of an upland ridge north of Beef Creek. Soil in this area is mapped as Zaneis-Slickspots complex, and site elevation is 366 m (1,200 ft) amsl. Vegetation observed in the area of the site consisted of sumac, wild plum, pecan, long stem bunch grass, Johnson grass, goldenrod, ragweed, black-eyed Susan, and iris.

Ten features were recorded at this site. The first feature is a large, concrete, porch slab with four pillars, two shorter ones in the middle and a tall pillar at each corner of the porch. The porch has one concrete step and a 12-m sidewalk extending north to rotted fence posts on the edge of a road depression. A large 7-x-12-m depression on the south side of this porch likely is the remains of a partial basement or storm shelter under the house. A remnant of the house foundation with a single step is located at the southwestern corner of this depression; three broken concrete posts line the adjacent driveway.

The second feature is located 35 m southeast of the house location and is a windmill base on a 3-x-5-m concrete slab. Rotting wooden planks are still attached to the slab with steel bolts. The third feature is a 2-m-wide depression 10 m south of Feature 1 that may be the remains of an outhouse.

Feature 4 is a concrete slab, while Features 5, 6, and 7 each consist of concrete foundations of pier-and-beam construction. Feature 4 measures 4 m x 4 m, Feature 5 is 5 m x 5 m, Feature 6 is 6 m x 4 m, and Feature 7 is 5 m x 9 m. Feature 7 may have had a 20-x-20-m pole barn attached to the pier-and-beam structure.

Features 8 and 9 consist of two possible silo foundations. One is a concrete circle 5 m in diameter; the second is a circular asphalt pad 6 m in diameter. These two features are situated side by side.

The tenth feature is a 1-m-deep depression that measures 2.5 m in diameter. Located 25 m east of Feature 1, it is lined with chunks of concrete and may have been a cistern.

Six shovel tests were excavated across the house area of the site. Two contained historic material, while the other four were sterile. Artifacts were recovered to a depth of 15 cm bs. Site area is estimated at 7,500 m² (Figure 116).

Historic Artifacts

Historic material was recovered from two shovel tests and from the surface. Diagnostic material from the shovel tests consisted of two white-whiteware fragments (1890-1990), one Fiestaware fragment (1930-1960), ash tint glass tableware fragments (1915-1990), a manganese solarized bottle glass fragment (1880-1920), a zinc canning seal (1869-1915) used with a Boyd's opaque liner (1900-1950), and wire nails (1880-1990). Surface material collected included an interior bristol stoneware fragment (1900-1990), wire nails (1880-1990), and a large metal washer.

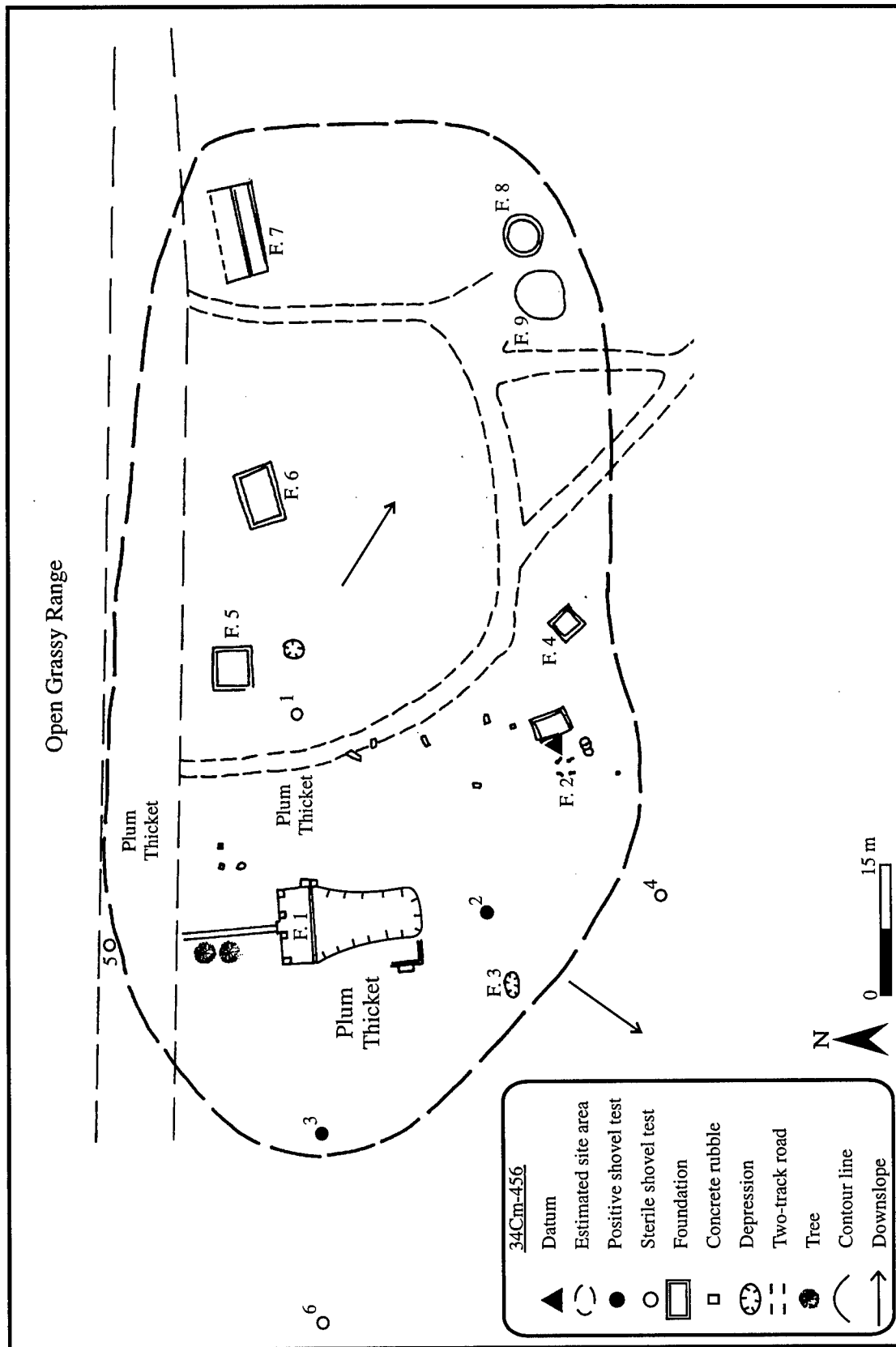


Figure 116. Plan map of site 34Cm-456 (92-86).

Archival Research

The land on which site 34Cm-456 is situated is located in Section 28, Township 3 North, Range 11 West of the Indian Meridian. The original homesteader owned the land for less than a year before selling it (Comanche County *Deed Books* 11:134, 35:172). Two families owned the property for most of its history between 1901 and government acquisition in 1942: the Schofields from 1905 to 1923, and the Weavers from 1923 to 1942 (Comanche County *Deed Books* 35:172, 181:515, 281:46).

Between 1901 and 1902, several mining notices were recorded in Comanche County *Deed Books* for portions of this site. Miners filing notices included J. Kalklash, E. E. Logan, Wm. and Jm. Chateau, D. Killie et al., and B. Clapham (Comanche County *Deed Books* 1:268, 269, 560, 564).

The original owner of the land was Jeremiah R. Johnson, who received a receipt for part of Section 28 from the U.S. government on 28 May, 1903 (Comanche County *Deed Books* 17:8). Johnson was granted a patent for the land on July 9, 1904 (Comanche County *Deed Books* 11:134). In 1903, he took out a mortgage on the land with Martin B. Schofield (Comanche County *Deed Books* 1:572). The land was deeded by Johnson to Schofield in March 1905 (Comanche County *Deed Books* 35:172). Schofield and his wife, Ethel, took out at least three mortgages on the land: one with a John B. Bartow, and two with Dickinson Reed Randerson Co. (Comanche County *Deed Books* 99:258, 156:37, 160:156). By 1923, foreclosure was pending, and on January 8, 1924, V. A. Livingston, the Sheriff, sold the land to V. H. Stevens for \$100 (Comanche County *Deed Books* 181:443). A Warranty Deed filed in 1925 indicates that V. H. Stevens sold the land to Ida Weaver of Elgin for \$6,000 on September 15, 1923 (Comanche County *Deed Books* 181:515). If the 1923 date on the backdated Warranty Deed is correct, Stevens sold the land to Weaver before he actually acquired it, making a profit of some \$5,900. Ida Weaver and her husband, Morgan, took out a number of mortgages over the next three decades (Comanche County *Deed Books* 194:623, 200:336, 208:14, 232, 226:398, 238:157, 221, 271:38). The Declaration of Taking transferring the land from Ida and Morgan Weaver to the U.S. government is dated October 21, 1942 (Comanche County *Deed Books* 281:46).

Either the Johnsons or the Weavers could have constructed the historic farmstead in Section 28. Both families may have lived at the site and been responsible for some of the buildings and structures there. It is also possible that tenants of either or both of the two families were associated with the site.

Summary

This site is the only example of a historic farmstead currently recorded at Fort Sill in the tall prairie region east of East Cache Creek. In addition, this site has one of the highest number of features of any site remaining at Fort Sill. Further testing as well as additional archival research is recommended in order to evaluate fully this site's potential for inclusion in the NRHP.

34Cm-457 (92-87)

Site 34Cm-457 is a low density lithic scatter located on a 3° upland slope, 200 m west of Frisco Creek. The soil in this area is mapped as Zaneis-Slickspots complex, and the elevation is 360 m (1,180 ft) amsl. Vegetation observed in the area of the site consisted of long stem bunch grass, Johnson grass, goldenrod, and black-eyed Susan. The site is located within an area that is currently being used as a hay field.

A large portion of the site is heavily eroded; most of the artifacts observed at this site are within this eroded area. Four tested cobbles and four flakes were observed at this site, all of which are Ogallala quartzite. No diagnostic artifacts or tools were observed on site. Three shovel tests were excavated in the small portion of the site area that has relatively undisturbed soil, but no cultural material was observed in any of these tests. Site area is estimated at 300 m² (Figure 117).

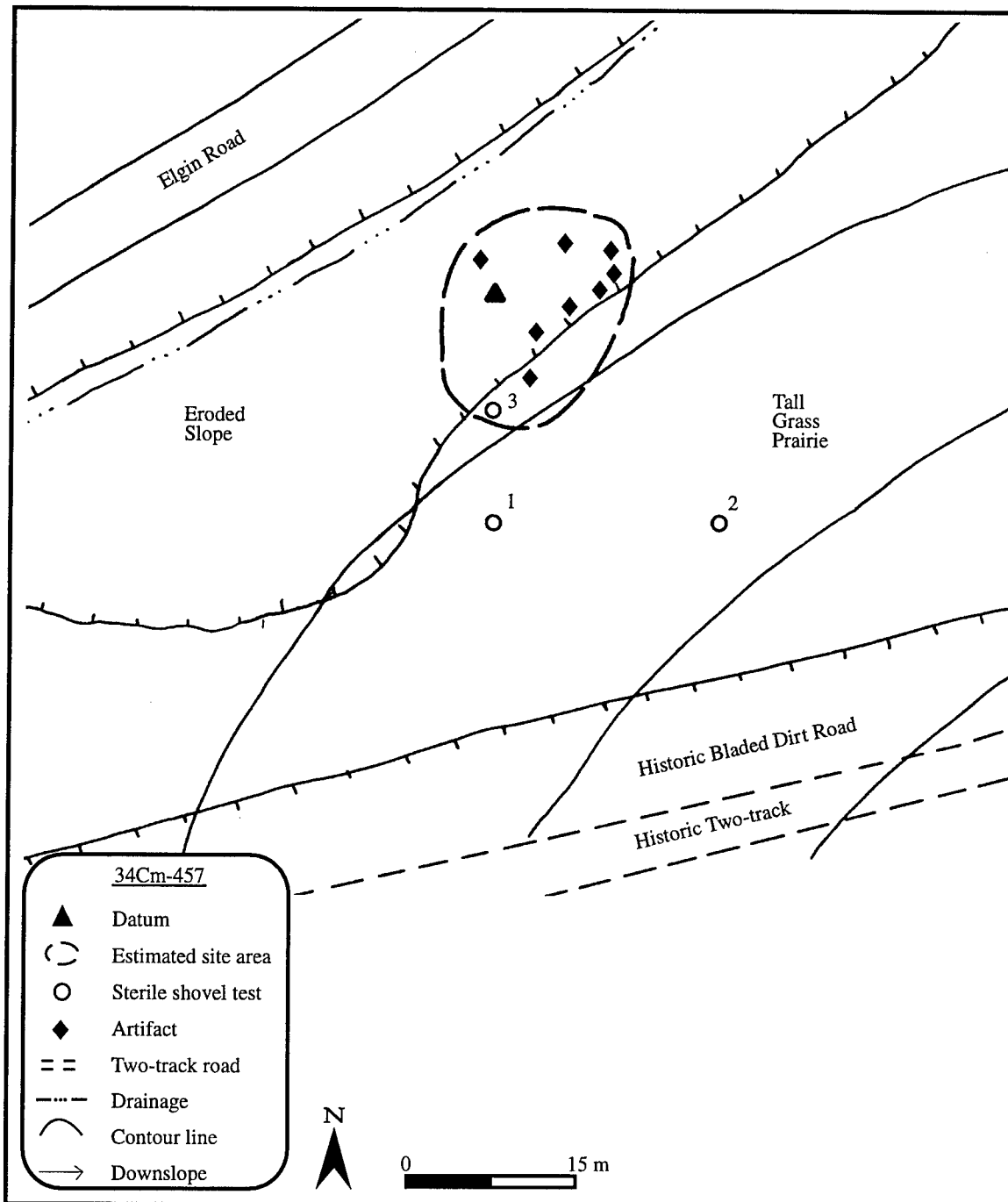


Figure 117. Plan map of 34Cm-457 (92-87).

Prehistoric Artifacts

Ogallala quartzite debris and tested cobbles were observed on the surface but not collected. Four pieces of Ogallala quartzite were collected from the surface of this site. One primary flake, one flake fragment, one core fragment, and an angular fragment comprise the cultural material collected from this site. One of the sample is between 1 and 2 cm in length, while the others are all greater than 5 cm in length.

Summary

This site is a low density lithic scatter with no evidence of buried or intact archeological deposits. Further testing is not recommended nor is this site recommended for inclusion in the NRHP.

Survey Area 8

Survey Area 8 is adjacent to the southern edge of Survey Area 7, between the southwestern boundary of the North Arbuckle Range Impact Area and the northwestern boundary of the South Arbuckle Range Impact Area. Totalling 945 acres, this area consists of level to gently rolling plains (Figure 118). Moderately rolling hills, including Dodge Hill, are located at the eastern end of the survey area.

Bedrock in this area consists of sandstone and mudstone conglomerate on the west and shale with some sandstone on the east. Soils are a mixture of Zaneis loam, Zaneis-Slickspots complex, and Lucien-Zaneis-Vernon complex on the uplands, with Port loam, Port-Slickspots complex, and Foard-Tillman soils on the Beef Flats that border Beef Creek. There are no major drainages within the survey area, only minor upland streams that flow into Beef Creek, which is located west of the survey area.

No sites were previously recorded for this area and no new sites were recorded. One ruin was previously known for this area (Dames and Moore 1980), a concrete bunker recorded by GMI as locality 92-207. In addition, the possible remains of a second bunker were located and recorded by GMI as locality 92-206. Locality discussions are presented in Appendix C.

Survey Area 10

This small survey area is surrounded by the North and South Arbuckle Range Impact areas, and consists of only 392 acres (Figure 119). The terrain is made up of level to gently rolling plains, while bedrock in this area consists of shale with some sandstone. Soils are Zaneis loam and Zaneis-Slickspots complex. Drainages in the areas consist of several small, intermittent upland drainages that flow northward into Scout Creek.

No sites or ruins have been recorded for this area and no sites were identified during survey. However, three localities were recorded: a concrete slab (locality 92-208), the remnants of five concrete blockhouses (locality 92-209), and five additional blockhouse remnants and a large concrete bunker, which were recorded as locality 92-210.

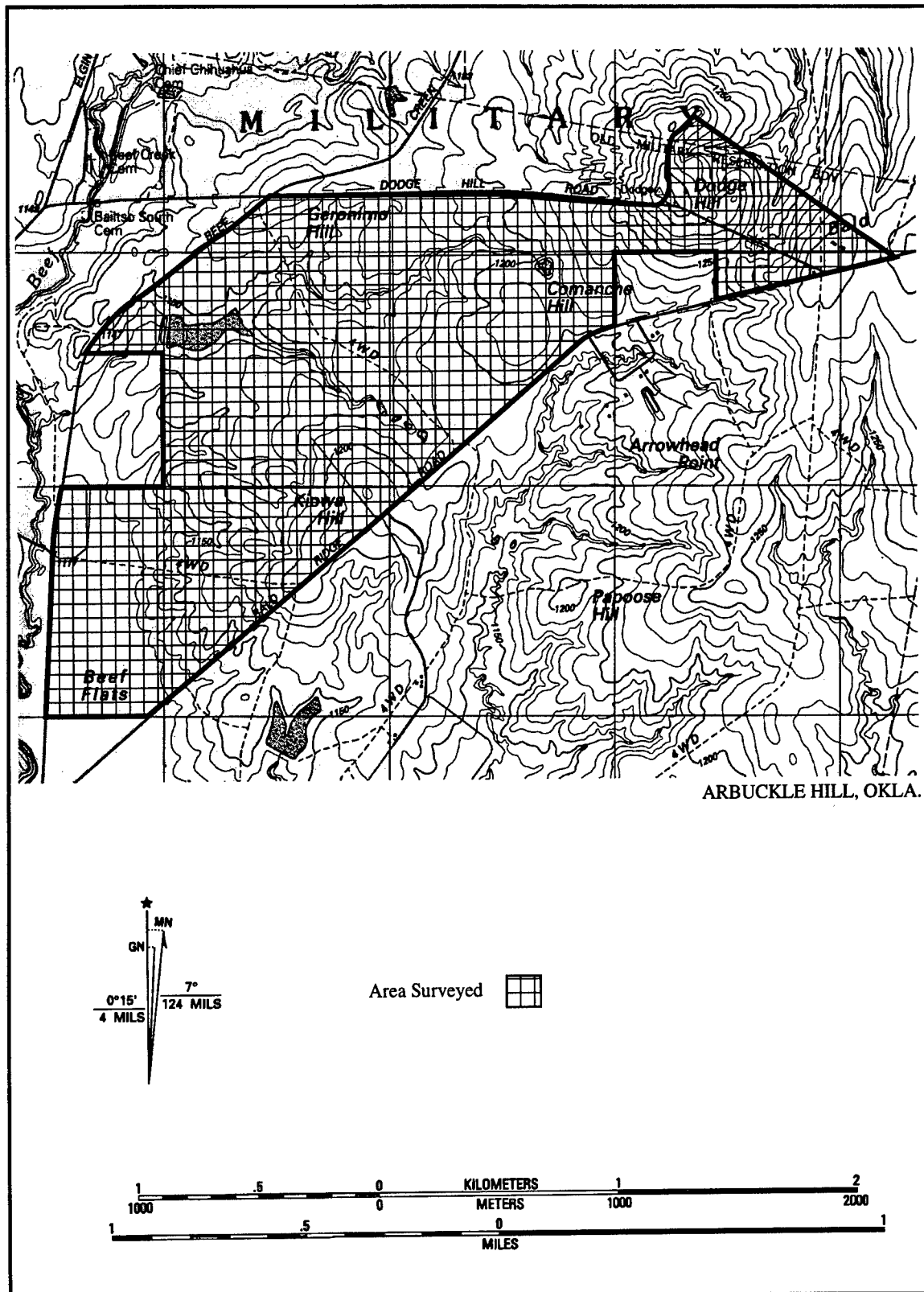


Figure 118. Location of Survey Area 8 within the Fort Sill Military Reservation.

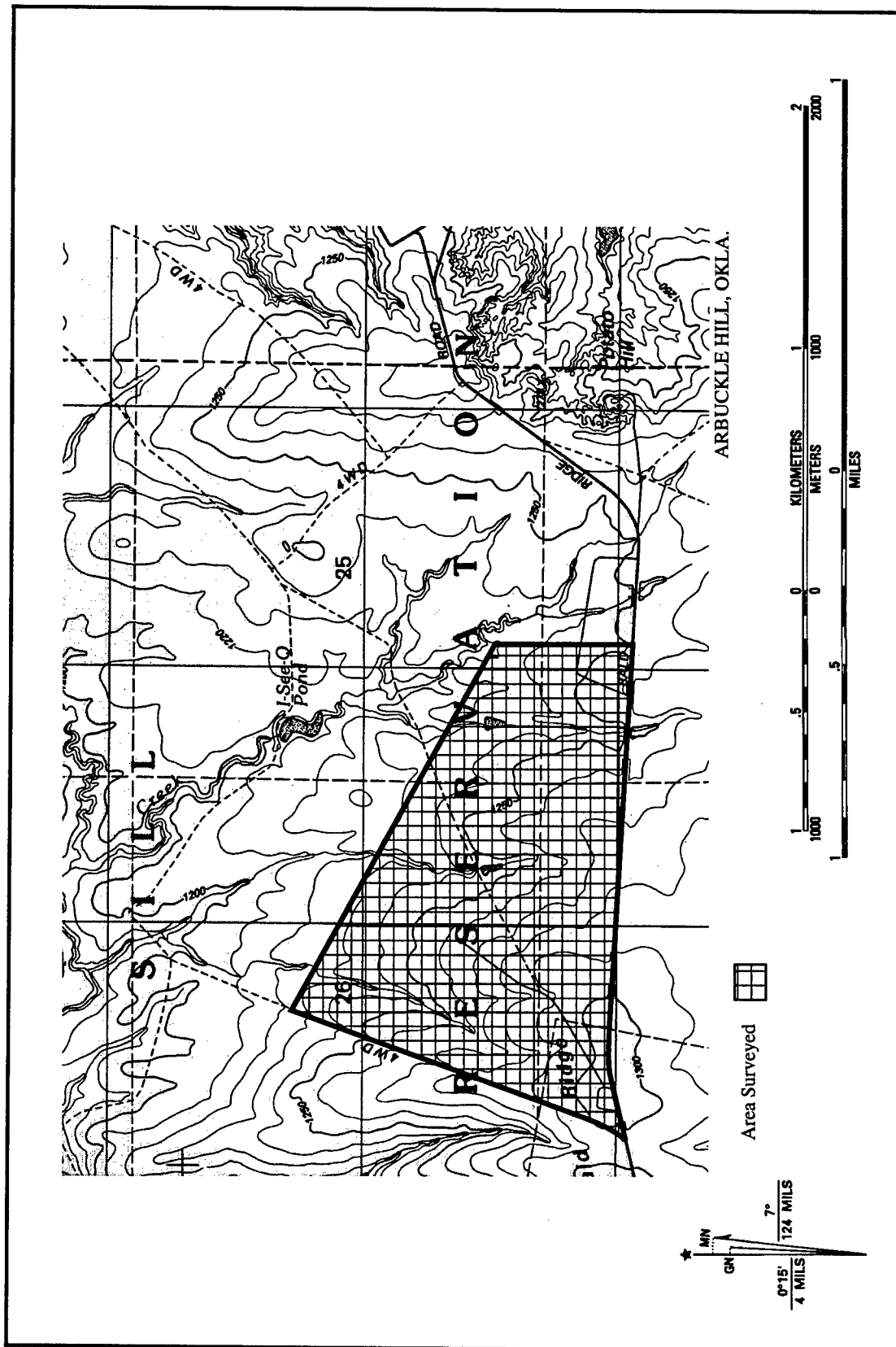


Figure 119. Location of Survey Area 10 within the Fort Sill Military Reservation.

Survey Area 11

Survey Area 11 is an 831-acre parcel located in the western portion of the Fort Sill Military Reservation Impact Area at the southwest end of the Quanah Range Impact Area (Figure 120). The survey area is made up of nearly level to gently rolling plains that flank Post Oak Creek. Near level bedrock is granite and rhyolite porphyry conglomerate, overlain by sand and gravel. There exists a complex mixture of soils in the area, with Port loam, Whitethorst sand loam, Konawa loamy fine sand, granite cobbly land, Foard-Slickspots complex, Lawton loam, and breaks-alluvial land complex all represented. Post Oak Creek and small intermittent drainages are the only waterways within the survey area. Natural vegetation within this survey area consists of fairly extensive stands of post oaks, blackjack oak, pecan, elm, hackberry, and dispersed juniper. These trees are concentrated along Post Oak Creek; however, most of the uplands support a moderately dense oak savanna. More open upland areas have mixed grasses and dispersed mesquite that are probably the result of past farming activity.

The 1977 archeological survey conducted by the Museum of the Great Plains covered approximately 500 acres that are contiguous with Survey Area 11 and an additional 62 acres that were included in the current survey area. No sites were recorded by the Museum for this area. The only cultural feature known previous to the current fieldwork was one ruin, Ruin 21, recorded by Dames and Moore (1980:51-53) as the remains of a concrete cellar. This cellar and additional features were located and recorded as site 34Cm-499 (92-140). New sites include historic sites 34Cm-481, 34Cm-485, and 34Cm-491, and prehistoric site 34Cm-487. Ten localities were also recorded for this area (see Appendix C).

34Cm-481 (92-116)

Site 34Cm-481 is a historic farmstead located on the level plain north of Post Oak Creek. Situated in a dense stand of trees and thick grasses, this site is at the southern boundary of the Quanah Range Impact Area. Soil in this area is mapped as Konawa loamy fine sand; site elevation is 402 m (1,320 ft) amsl. Vegetation observed in the area of the site consisted of post oak, blackjack oak, hackberry, elm, juniper, sumac, wild plum, sloe, long stem bunch grass, Johnson grass, greenbrier, and poison ivy.

Seven features comprise this site (Feature 121). The first feature is a concrete pier-and-beam house foundation with a concrete slab front porch and a concrete slab back porch. The second feature is a 4-x-5-m concrete storm shelter located 5 m from the house. Aside from a missing door, the shelter is intact and is in good condition. An unusual feature of this storm shelter is a small window on the west side. Scratched into the concrete of the shelter is "M.C.H. 1947." This farmstead is not on the 1946 aerial photos, so the 1947 date can be taken as the initial date for this site.

The third feature is a 19-x-14-m concrete barn slab. The barn slab has a concrete ramp attached to the south edge and a concrete livestock feeding station or trough in the interior. The fourth feature, a drilled well, is adjacent to the southeast corner of the barn slab. The ceramic well opening is contained within a 1-x-2-m concrete housing. The fifth feature is another well, located 15 m southwest of the house foundation. This well consists of a 2-m² concrete slab and a 15-cm well-head pipe.

The sixth feature is a 4-m² concrete slab located 28 m southwest of the second well. Partially buried under silt and leaf litter, this slab has no foundation bolts and is of unknown function. The last feature is a concrete-edged entrance drive from the dirt road in front. This drive is approximately 30 m north of the site datum.

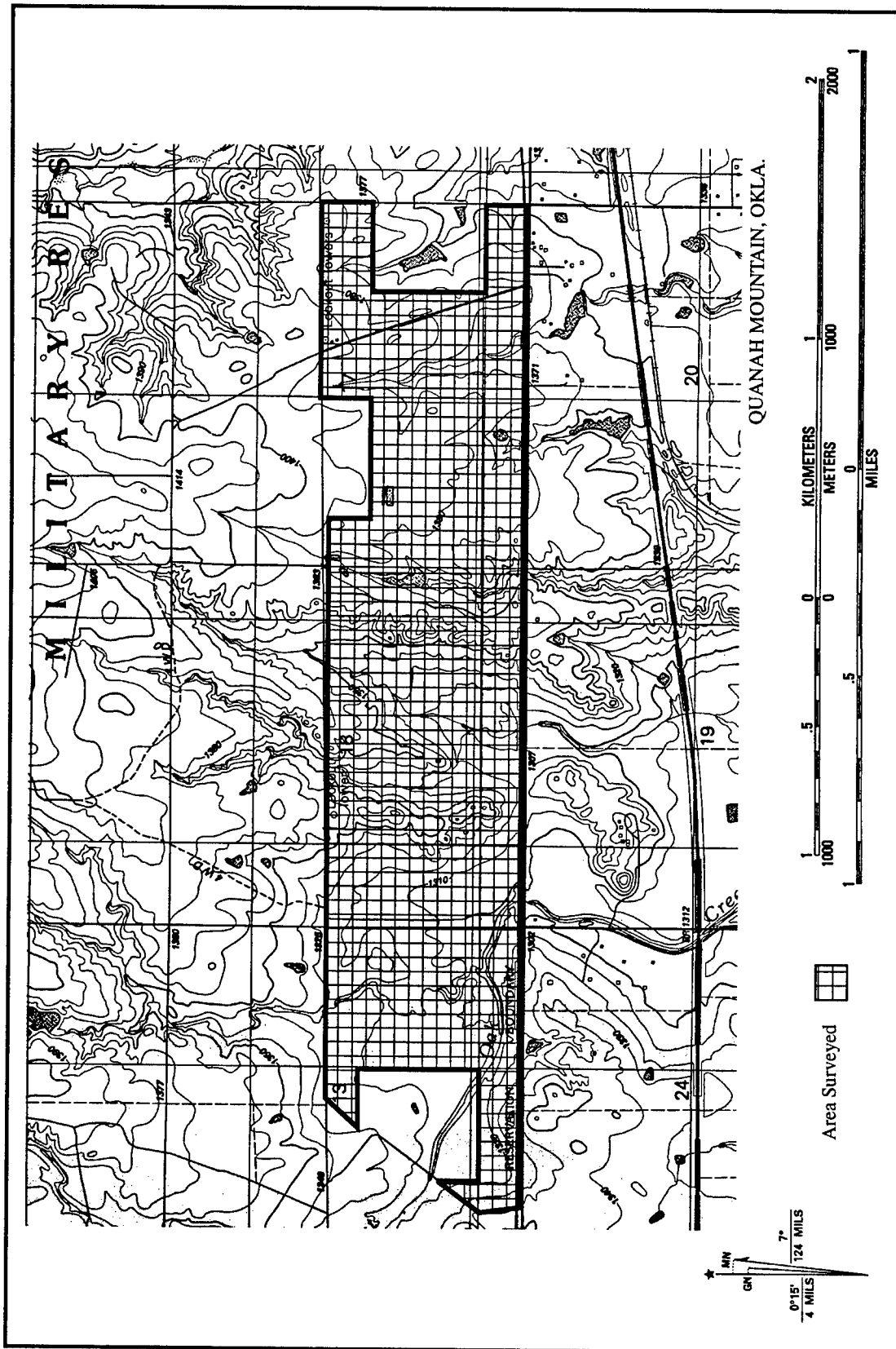


Figure 120. Location of Survey Area 11 within the Fort Sill Military Reservation.

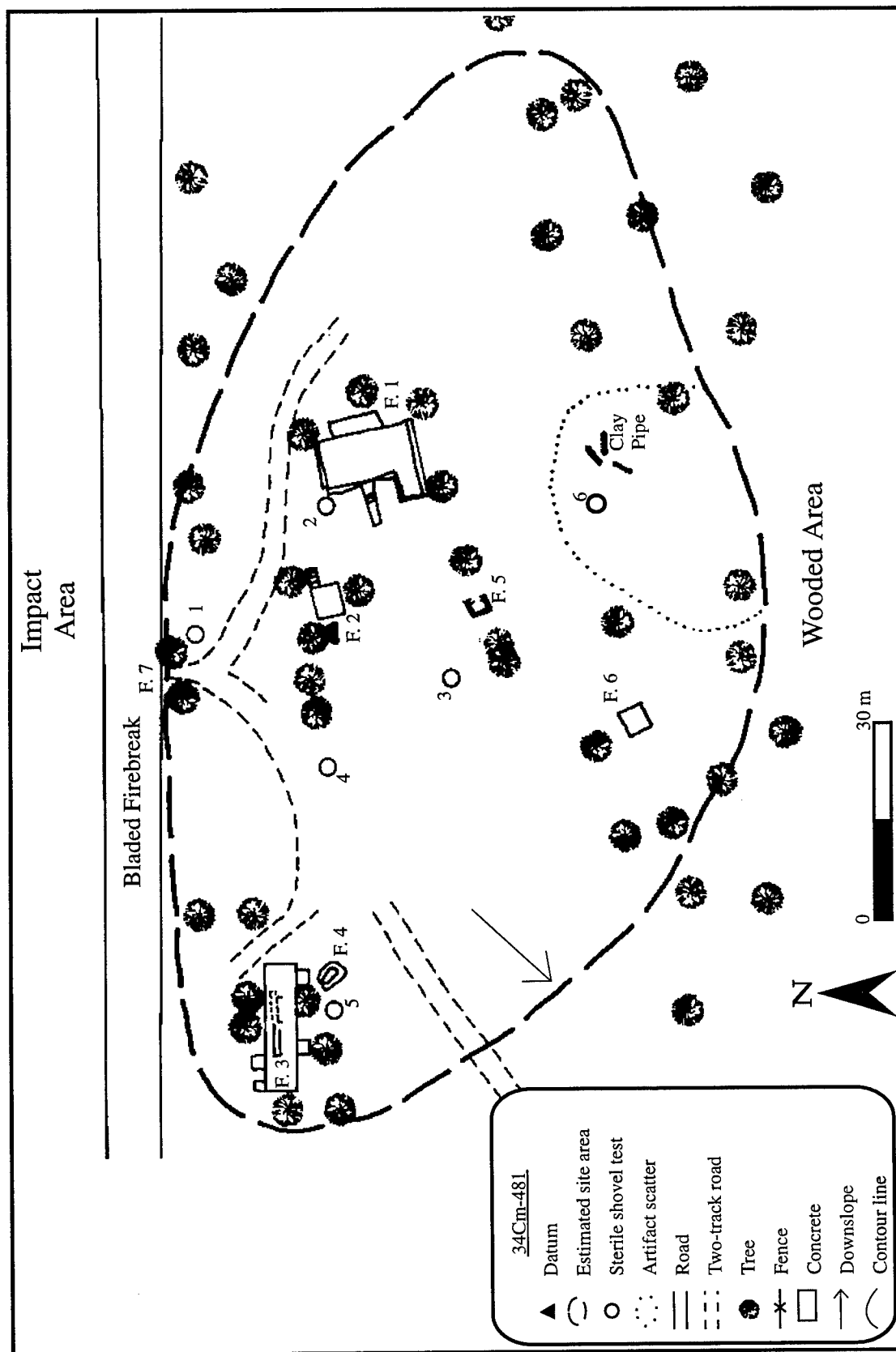


Figure 121. Plan map of site 34Cm-481 (92-116).

Six shovel tests were excavated at this site. No cultural material was observed in any test unit. Site area is estimated at 9,900 m².

Historic Artifacts

A small quantity of historic material was collected from the surface (Figure 122). Glass artifacts included several stippled bottle bases (1940-1990, including two from Owens-Illinois Glass Company [1940-1954]), a light green Royal Crown Owens-Illinois bottle (1940-1954), and a clear Brockway Glass Company bottle (1925-1990). Ash tint glass (1915-1990) included bottles and a pressed bowl fragment. Ceramic material consisted of three fragments of light ivory tint whiteware (1920-1990) and an exterior/interior albany slip stoneware fragment (1875-1900). A MBD of 1922 is estimated for the site from the recovered diagnostic material.

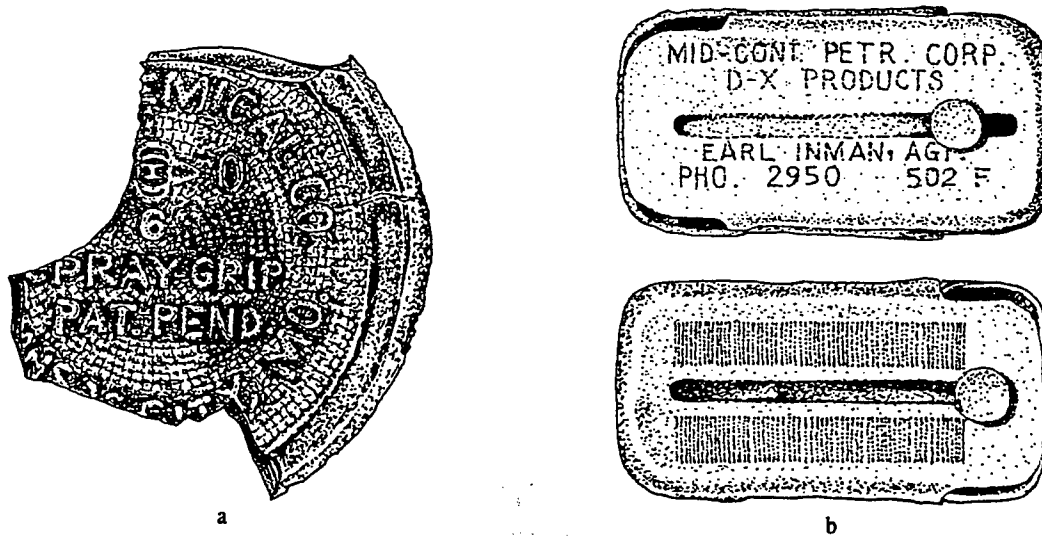


Figure 122. Selected historic artifacts from 34Cm-481: (a) brown bottle base with Owens-Illinois maker's mark; (b) aluminum razor box. (Scale 1:1)

Summary

On the basis of age alone, this site does not qualify for the NRHP. However, this site does contain the well-preserved remains of one of the last farmsteads constructed within the confines of the Fort Sill Military Reservation and contains material remains from a short occupation. This site may be of potential value to future researchers and should therefore be protected from further disturbances.

34Cm-485 (92-123)

Site 34Cm-485 represents the location of a farmstead that was originally identified from aerial photographs taken in 1946. The site is located south of Post Oak Creek in an area mapped as Port loam soil; elevation of the site is 396 m (1,300 ft) amsl. Vegetation observed in the area of the site consisted of post oak, black locust, black walnut, greenbrier, and mixed grasses.

The site consists of the fragmentary remains of a concrete foundation in association with a scatter of historic artifacts spread over an area of 14,000 m² (Figure 123). An abandoned, tree-lined section road passes the western edge of this concrete scatter, while an active, unimproved dirt road is located 40 m to the east. The only artifacts observed in the area of the foundations were an iron wagon wheel and fence wire. Five shovel tests were excavated around the foundation rubble, with one test yielding a wire nail.

A scatter of historic artifacts was observed in the firebreak located 80 m south of the foundation remnants. Manganese solarized glass, concrete fragments, bricks fragments, whiteware, and milk glass were observed in the firebreak. Historic material was also observed to the east of the site during the overall intensive shovel testing of this project area.

Summary

Examination of aerial photographs indicates that the original location of the farm structures was in the vicinity of the firebreak. These structures were apparently totally destroyed during construction of the firebreak and the high voltage lines that follow the break. The foundation remnants are believed to have been dumped in their current location after acquisition of the property by the government. The extensive dispersal of artifacts and the low artifact densities observed in most portions of the site are a further indication of the extensive disturbance to the cultural deposits at this site. Due to this extensive disturbance, this site is not recommended for further testing and is not recommended for inclusion in the NRHP.

34Cm-486 (92-124)

This site represents the location of a large farmstead situated on the south side of Rock Creek. There are two concentrations of features and artifacts: one at the western end of the site area and the second at the eastern margin. Soil in this area is mapped as Port loam, and site elevation is 399 m (1,310 ft) amsl. Vegetation observed in the area of the site consisted of post oak, juniper, pecan, elm, sumac, wild plum, long stem bunch grass, and Johnson grass.

This site was originally recorded as two sites. The field number 92-124 was assigned to the western concentration of features and artifacts, while the field number 92-125 was assigned to the eastern concentration of features and artifacts. Aerial photographs from 1946 and archival research have indicated that these two areas are both part of the same farm complex, with structures at the eastern and western ends and an extensive farmyard and possible pow-wow grounds in between these two areas. Therefore, the two sites were combined under the field designation 92-124 and were assigned one state site number.

Two deeply rutted dirt roads cross the western portion of the site area. One road passes next to the foundation rubble, while the second, lined with juniper trees and iris, is located to the east. The western portion of the site includes the rubble of a concrete slab and a scatter of bricks covering approximately 600 m². Located 65 m to the north is a stone-lined well that measures 1.1 m in diameter and is estimated to be 7.5 m deep. Located directly northwest of the well is a 1,200-m² trash dump containing bottles, glass fragments, ceramic fragments, and cans. Straddling the dump are two barbed-wire fence lines (Figure 124).

Five shovel tests were excavated, resulting in one positive test unit. This positive shovel test produced 46 pieces of glass including bottle glass, window glass, and green glass. Additional shovel tests were

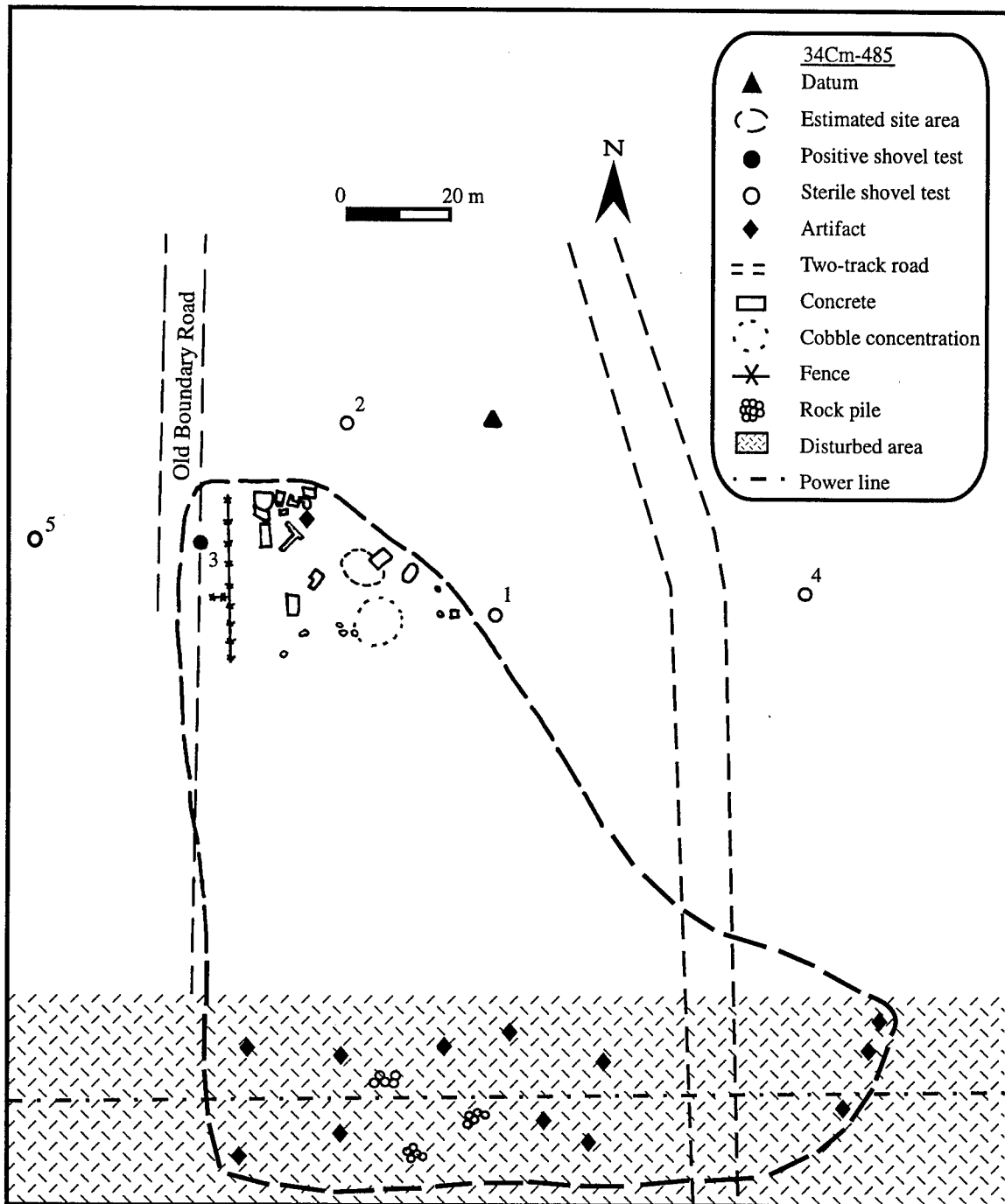


Figure 123. Plan map of 34Cm-485 (92-123).

attempted south of the concrete rubble and brick scatter, but this area was found to be a bare granite cobble land surface with no remaining surface sediments.

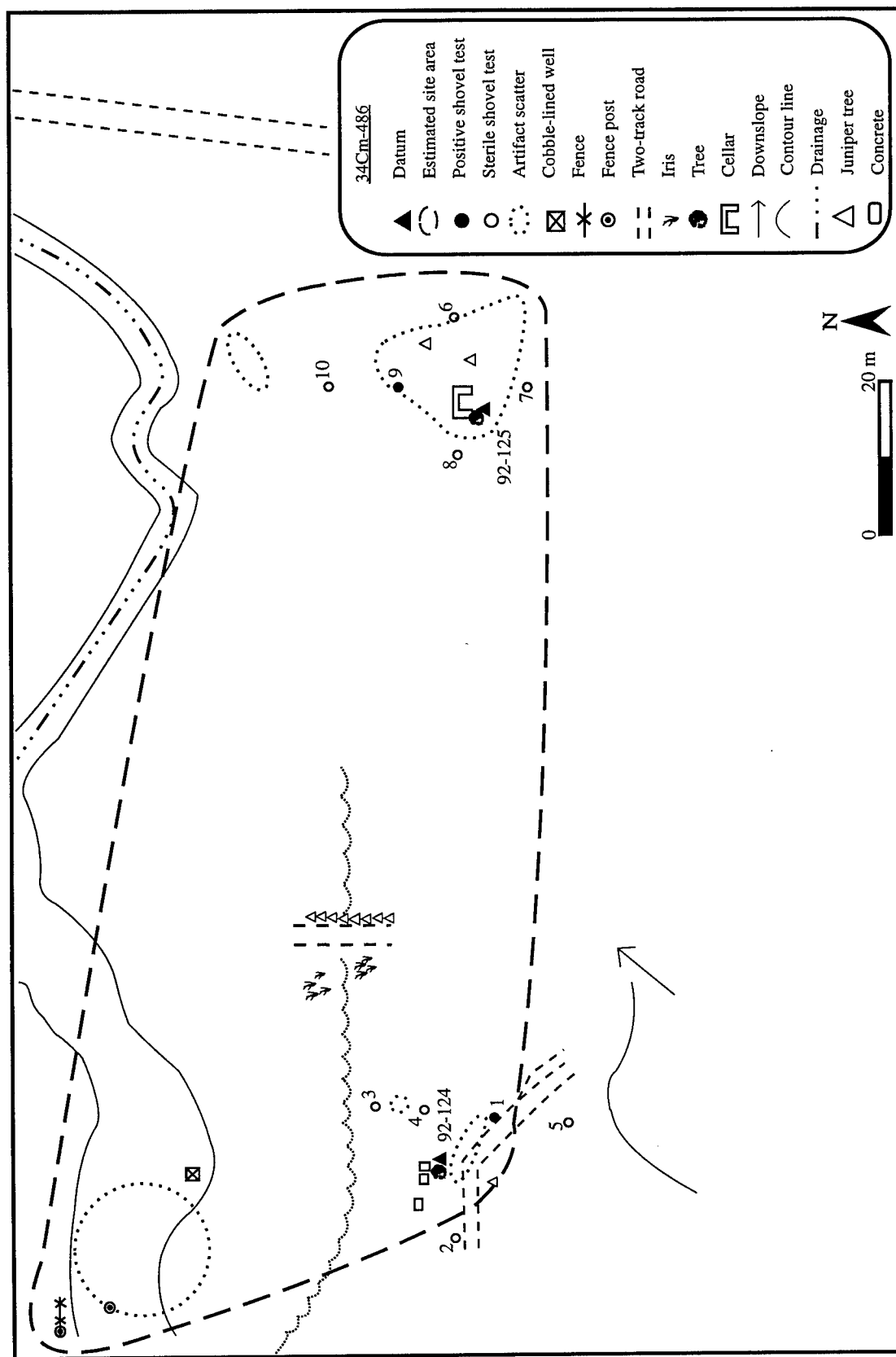


Figure 124. Plan map of site 34Cm-486 (92-124).

The second concentration of features is located 75 m north of Rock Creek and 80 m east of the features described above. Observed on the ground surface were the concrete footings from a building foundation and a 2-m by 3.5-m concrete-and-cobble cellar located immediately to the west of these footings. Around the cellar is a 600-m² scatter of small bottles, cobalt glass, cans, hog wire, and bricks. More recent trash related to military activities is also scattered across the site area. Five shovel tests were excavated in this area. One test yielded wire nails and one glass fragment.

Historic Artifacts

Western Concentration: Material was collected from the surface and from one shovel test in this part of the site (Figures 125 and 126). Historic material from the one shovel test consisted of 20 window pane glass fragments and an aqua bottle fragment (1860-1990). Diagnostic material collected from the surface included an ash tint machine-made bottle glass fragment (1915-1990), Owens-Illinois glass (1929-1954; 1954-1990), a Pierce Glass Company medicine bottle (1910-1917), and a green machine-made bottle (1910-1990). A spatterware stoneware fragment was also collected (1890-1915).

Eastern Concentration: Twenty-two historic artifacts were collected from the surface and from one shovel test. Diagnostic material from the shovel test consisted of three wire nails (1880-1990) and a fragment of green milk glass (1920-1950). Surface diagnostic material consisted of a machine-made amber bottle (1910-1990), amber stippled bottle bases (1940-1990), ash tint bottle glass fragments (1915-1990), and an Owens Bottle Company jar base (1915-1929). One historic ceramic fragment of Fiestaware (1930-1960) was also recovered. A MBD of 1928 is estimated for the site, based on the recovered diagnostic historic material collected from the surface.

Archival Research

This site is situated in Section 16, Township 2 North, Range 14 West. Site 34Cm-486 was continuously owned by Comanches (probably by one family) between allotment and government acquisition of the land in 1956 (Comanche County *Deed Books* 170:361, 446:61-64). Neu-na-sy was originally allotted the property (Anonymous n.d.:26). In 1919, Lit-Chi-Ni, "sole heir of Nen[sic]-na-sy, deceased" let an oil and gas mining lease to Fred J. Amphlett and Edward S. Malone of Lawton and Oklahoma City (Comanche County *Deed Books* 170:361). No further transactions in connection with this property are recorded in the Comanche County *Deed Books* until 1956, when the U.S. government obtained the land from "Monenerkit[,] Margaret Monenerkit and Leslie Poahway, her husband, Dorothy Tabbyyetchy Lorentino and William Lorentino her husband, Winona Tabbyyetchy Chase and Donald Chase, her husband, Morris Tabbyyetchy, Single[,] Hanna Kowneo Given and Joshua Given her husband" for \$12,990 (Comanche County *Deed Books* 446:61-64).

Fort Sill real property records dating to the year of acquisition of the land state that improvements to the property included one concrete 12-x-8-ft cave; two diversion terraces, approximately 800 yards long; a water well with rope and pulley "12' x 15' deep, 3' across"; a pond; and "Pow-wow park grounds, approx. 125' x 15'" (Fort Sill Real Property Office 1959:n.pg.).

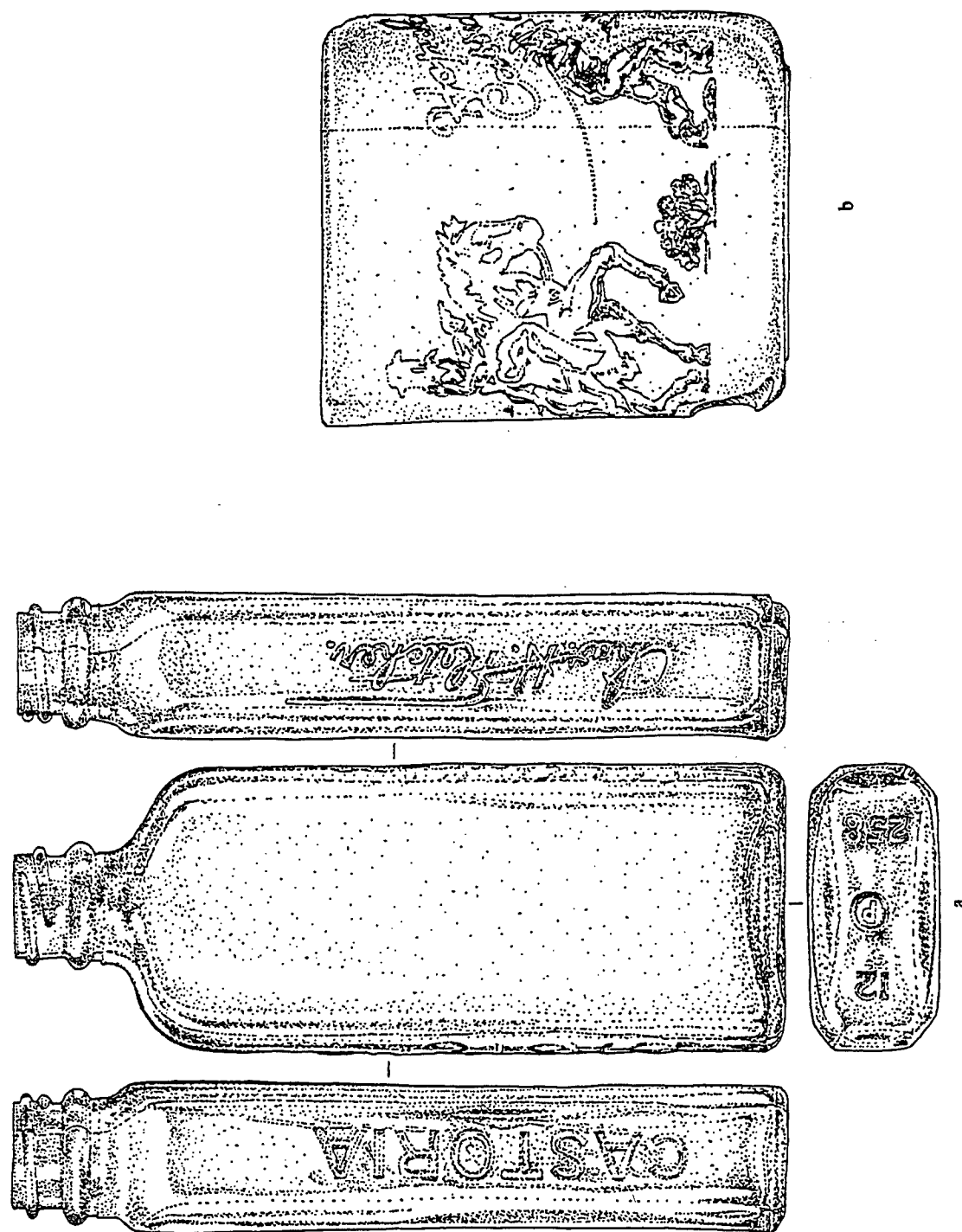


Figure 125. Selected historic artifacts from 34Cm-486: (a) light aqua Pierce Glass Company medicine bottle; (b) milk glass Hopalong Cassidy Cup. (Shown at 90% of actual size)

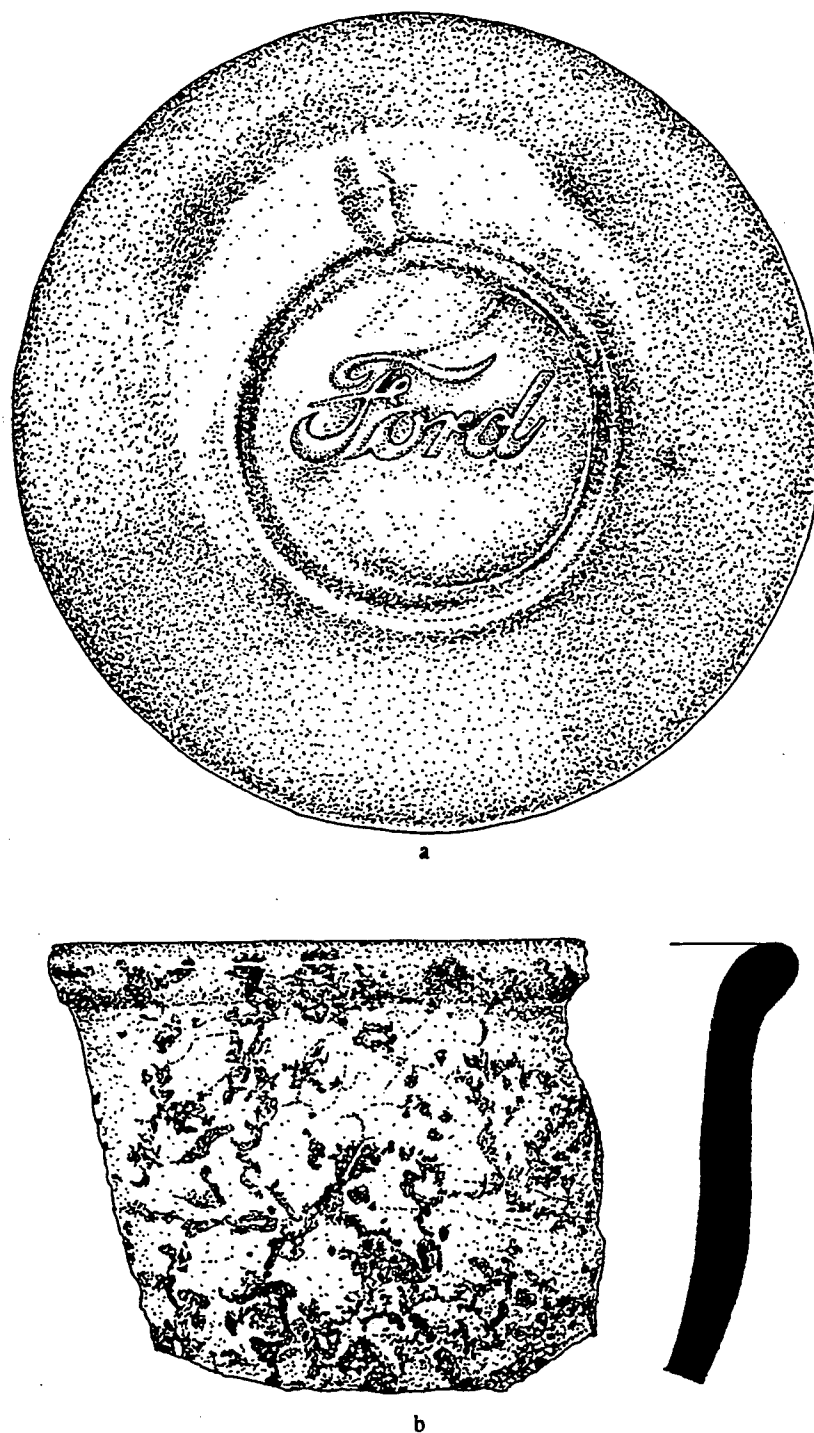


Figure 126. Selected historic artifacts from 34Cm-486: (a) Model T Ford hubcap; (b) spatterware stoneware custard cup fragment. (Scale 1:1)

Summary

It is possible that a lease of the land to non-Native Americans or Native Americans other than Neu-na-sy and his or her heirs exists, and that lessees were responsible for the creation of site 34Cm-486. However, there is no evidence to suggest that Neu-na-sy and his or her heirs did not live on the land, and the existence of a pow-wow grounds indicates Native American use of the parcel. Because of the possibility that the farmstead originally was built by a Comanche family and inhabited by the same family for a period of approximately 55 years, the site is considered potentially significant and worthy of further investigation. Census records, oral interviews, and lease and inheritance records at the BIA office in Anadarko may provide evidence of whether or not the Neu-na-sy family lived on the parcel. Further testing of the site is recommended for a full evaluation of the archeological deposits and to aid in determining this site's potential for inclusion in the NRHP.

34Cm-487 (92-126)

Site 34Cm-487 is a lithic scatter located on the east bank of Post Oak Creek. The material was observed on the surface of a high voltage powerline firebreak extending approximately 80 m east to west. The soil in this area is mapped as Port loam, and site elevation is 396 m (1,300 ft) amsl. Vegetation observed in the area of the site consisted of post oak, pecan, black walnut, mixed grasses, greenbrier, and poison ivy.

This site is a fairly extensive, moderately dense lithic scatter. Lithic artifacts observed and collected from this site include end scrapers, unifacially modified flakes, and lithic debris. Raw material is primarily chert, but the assemblage includes some quartz. No temporally diagnostic artifacts were observed at this site.

Seventeen shovel tests were excavated and recorded at this site, with one shovel test yielding burned bone and charcoal. No cultural material was directly associated with this material; the closest observed surface artifacts were 25 m east of this test unit. However, the faunal and floral material may be associated with the site, and was included within the site area estimate of 1,250 m² (Figure 127).

Prehistoric Artifacts

The artifact assemblage from this site is composed of one end scraper fragment, two modified flakes, 23 pieces of lithic debris from the surface, and two pieces of charcoal and one piece of burned bone from a shovel test. Additional chert and quartz lithic debris were observed but not collected.

Tools

A large flake of Alibates (N7) chert that was collected exhibits extensive modification along one lateral edge, while the opposite edge and both proximal and distal ends have been broken (Figure 128). Numerous small flakes have been removed from the ventral face of this flake, possibly representing several edge renewal episodes. This artifact measures 3.5 cm x 2.7 cm x 1.0 cm and weighs 113.45 g.

A small end scraper fragment was collected with just a small segment of the bit and one lateral edge remaining. This scraper was made from dark gray Edwards chert and measures 1.5 cm x 1.2 cm x .7 cm and weighs 1.05 g.

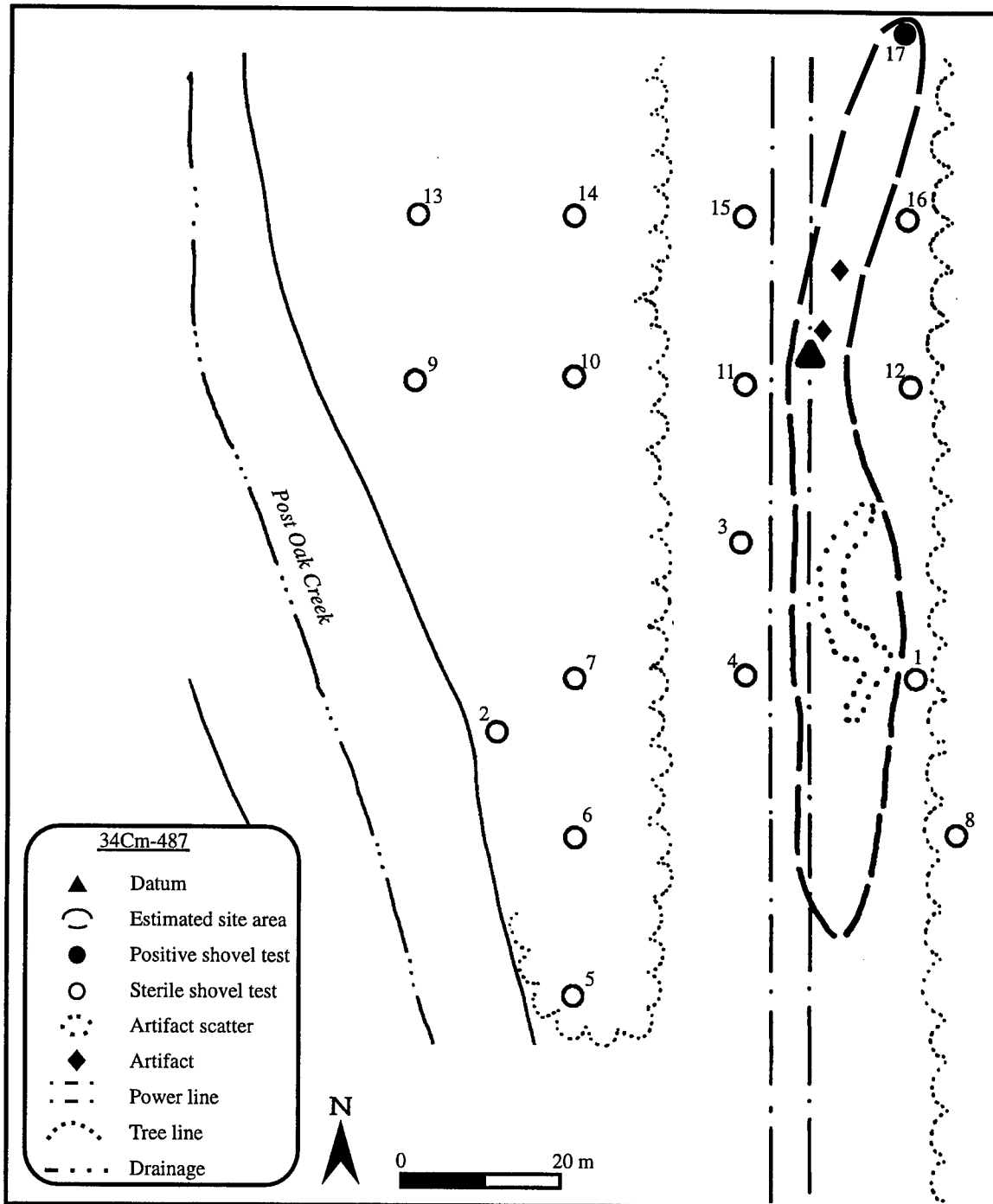


Figure 127. Plan map of site 34Cm-487 (92-126).

A fragment of an Edwards chert flake was also collected; it has use wear along the only remaining intact edge. No flakes appear to have been intentionally removed. This item measures 1.9 cm x .9 cm x .2 cm and weighs .45 g.

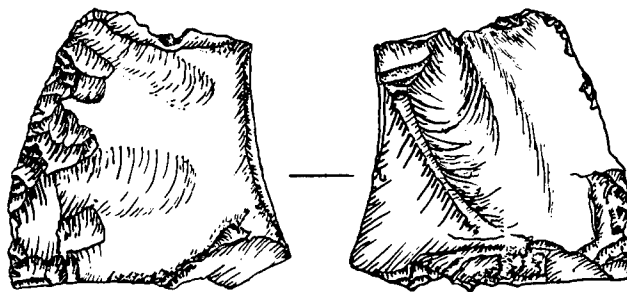


Figure 128. Diagnostic lithic artifact recovered from 34Cm-487 during the 1992 survey: Alibates chert modified flake. (Scale 1:1)

Lithic Debris

Three tertiary chert flakes were collected from this site: one of Alibates, one of Edwards, and one bifacial thinning flake of an unidentified chert. The first two of the sample are smaller than 1 cm in size, while the latter is between 1 and 2 cm.

Eighteen flake fragments were also collected. Two of the flake fragments were produced from Alibates chert, one from Edwards chert, nine from various other cherts, and six from quartz. Size ranges are: less than 1 cm in length (n=9), between 1 and 2 cm (n=8), and between 2 and 3 cm (n=1). In addition, four angular fragments of quartz were collected, with the dimensions of three fragments falling into the 1-2 cm range, and the fourth into the 2-3 cm range.

Summary

The site area has been impacted by the construction of the powerline and the continuing maintenance of the firebreak. It is unknown if any portion of the site extends outside the firebreak. This site is located within an area that was extensively shovel-tested. Test units were placed at 20-m intervals along the east bank and at 30 m intervals elsewhere; no shovel tests in the site area yielded prehistoric material. However, considering the ineffectiveness of shovel testing in general at Fort Sill, it is recommended that further testing be conducted at this location in order to evaluate fully this site's potential for the NRHP.

34Cm-491 (92-131)

Site 34Cm-491 is a historic farmstead located on an oak and juniper covered terrace 90 m north of Post Oak Creek. Soil in this area is mapped as Konawa fine sandy loam, although extensive erosion has created a land surface more closely resembling granite cobbly land. The elevation of the site is 399 m (1,310 ft) amsl. Vegetation observed in the area of the site consisted of blackjack oak, post oak, hackberry, elm, juniper, sumac, Johnson grass, ragweed, prickly pear cactus, long stem bunch grass, poison ivy, greenbrier, and goldenrod.

Two features and a moderately dense scatter of historic artifacts were observed at this site. The main feature is a 5-x-7-m concrete slab foundation. The slab has been crushed and displaced by heavy military

vehicles that use this area for training exercises. The second feature is a 3-x-4-m depression located 3 m from the foundation slab. Metal, vessel glass, and crockery fragments were found within this depression and scattered around its edges. This depression may be the remnant of a storm cellar.

The scatter of historic artifacts extends over a 3,375-m² area around the concrete foundation (Figure 129). Material observed included glass fragments, crockery fragments, and miscellaneous automobile parts believed to be from a Model T Ford. Six shovel tests were excavated at this site, but no subsurface cultural material was recovered.

Historic Artifacts

The 13 historic artifacts collected from the surface of 34Cm-491 include ceramics consisting of one exterior/interior bristol stoneware fragment (1900-1990), one fragment of exterior albany/interior plain stoneware (1900-1990), and two Fiestaware fragments (1930-1960). Glass material collected included an aqua jar base from Foster-Forbes Glass Company (1912-1924), two amber snuff jar lip fragments (1920-1990; Figure 130), green soda bottle fragment (1930-1990), and one ash tint fragment (1915-1990).

Summary

The portion of Survey Area 11 that contains this site is used by tracked vehicles for access to the Multiple Launch Rocket System (MLRS) range. The area is crossed by a number of unimproved military roads resulting in severe erosion, removal of most or all of the surface sediments in the site area, and destruction of the features. Considering the extremely poor condition of this site, no further work is recommended, and the site is not considered eligible for inclusion in the NRHP.

34Cm-499 (92-140)

This site is listed as Ruin 21 by Dames and Moore (1980). When surveyed, this site was found to contain the remains of a historic farmstead situated on the level plain bordering the southern edge of the Quanah Range Impact Area. The site, located within an area mapped as granite cobbly land, has an elevation of 424 m (1,390 ft) amsl. Vegetation observed in the area of the site consisted of post oak, mesquite, wild plum, hackberry, sunflowers, wildflowers, goldenrod, long stem bunch grass, Johnson grass, milkweed, ragweed, and mixed grasses.

Two features were observed at this site. The first is a partial building foundation measuring 4.5 m x 9 m. The eastern and western ends of the foundation are intact, but the central area appears to have been displaced by a bulldozer or other piece of heavy equipment. No artifacts were observed in direct association with this foundation.

The second feature is a partially collapsed, water-filled storm cellar. The shelter's roof, stairs, door frame, and front wall are still intact, but the rear wall has collapsed and it appears that the roof will soon follow. The exterior measurements are 7 m x 4 m. Interior measurements were not attempted, due to the possibility of injury to personnel.

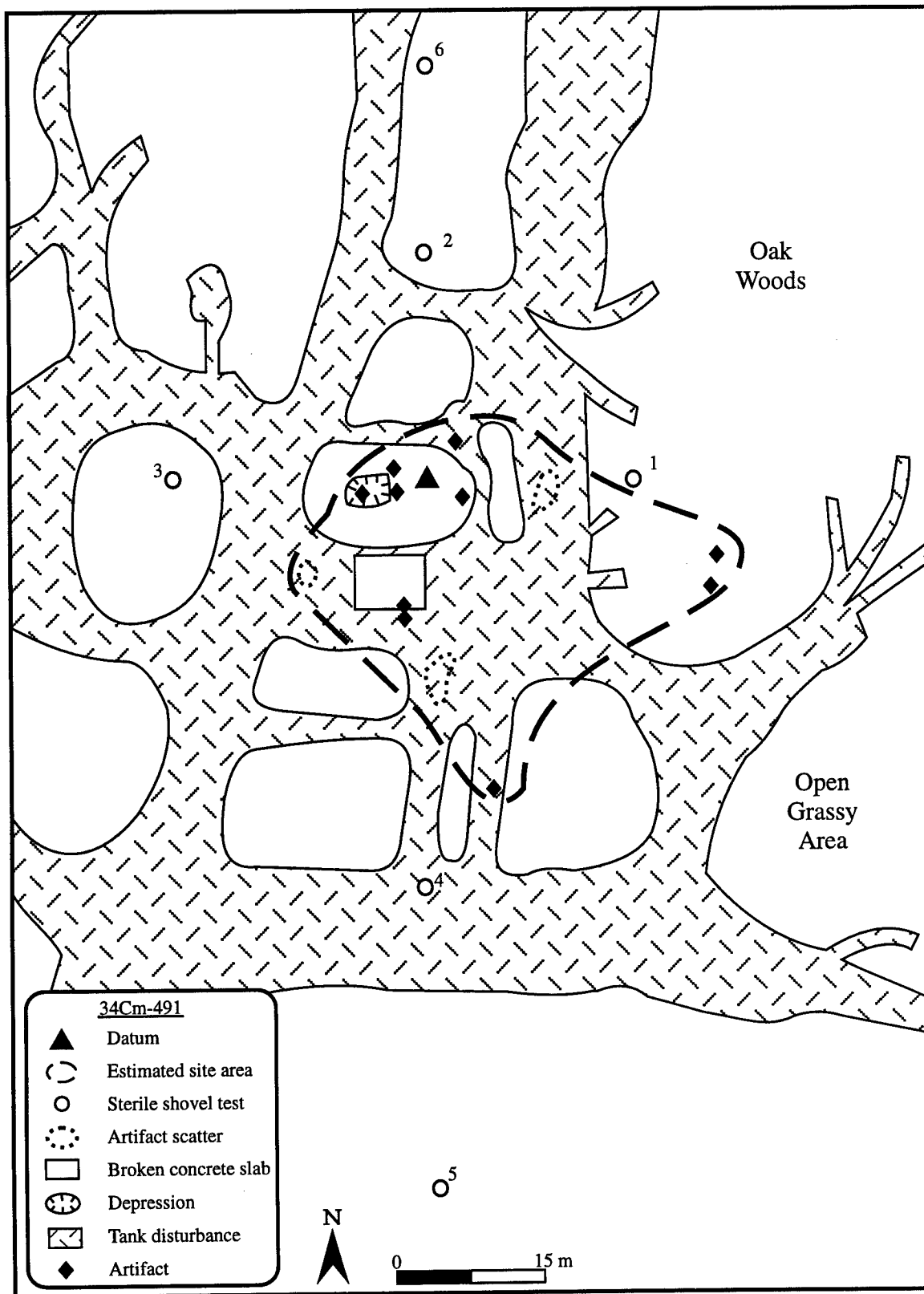


Figure 129. Plan map of site 34Cm-491 (92-131).



Figure 130. Machine made snuff bottle lid from 34Cm-491. (Scale 1:1)

Large chunks of concrete are scattered within the site area. These concrete chunks appear to be the missing sections of Feature One. Other than this scatter of concrete, there is no evidence of any other structures having been located here at this site.

There is a low density scatter of historic artifacts visible in the site area. A majority of the items were observed in the firebreak on the north side of the site area. Outside of the firebreak, ground cover made visibility of surface artifacts difficult. The material that was observed included whiteware, metal, manganese solarized glass, and cobalt blue glass.

Fourteen shovel tests were excavated within the site area, with five yielding cultural material. Material recovered from shovel tests included concrete fragments, glass fragments, and metal fragments. Shovel Test 6, located 37 m east of the site datum, contained 22 specimens to a depth of 52 cm bs, including metal, glass, whiteware fragments, deer bone, a wire nail, and a Model T sparkplug. Three of the other four positive shovel tests are within 20 m of Shovel Test 6.

Approximately 100 m southwest from the main site are numerous fence posts strung with hogwire. A dry stock pond is an additional 100 m to the west. No cultural material was observed near the fence line or the pond; therefore, the estimated site area of 5,000 m² does not include the stock pond or fence line (Figure 131).

Historic Artifacts

Historic material was recovered from the surface and five shovel tests. Diagnostic artifacts recovered from the shovel tests consisted of one bluish tint whiteware fragment (1880-1930), pink Depression glass fragments (1920-1950), ash tint bottle fragments (1915-1990), manganese solarized glass fragments (1880-1920), and a Model T spark plug (Figure 132a). Diagnostic surface material consisted of a light ivory tint whiteware fragment (1920-1990), one white-whiteware fragment (1890-1990), a bluish tint whiteware fragment (1880-1930), manganese solarized (amethyst) glass (1880-1920; Figure 132b), and a tin hinged-top tobacco box (1910).

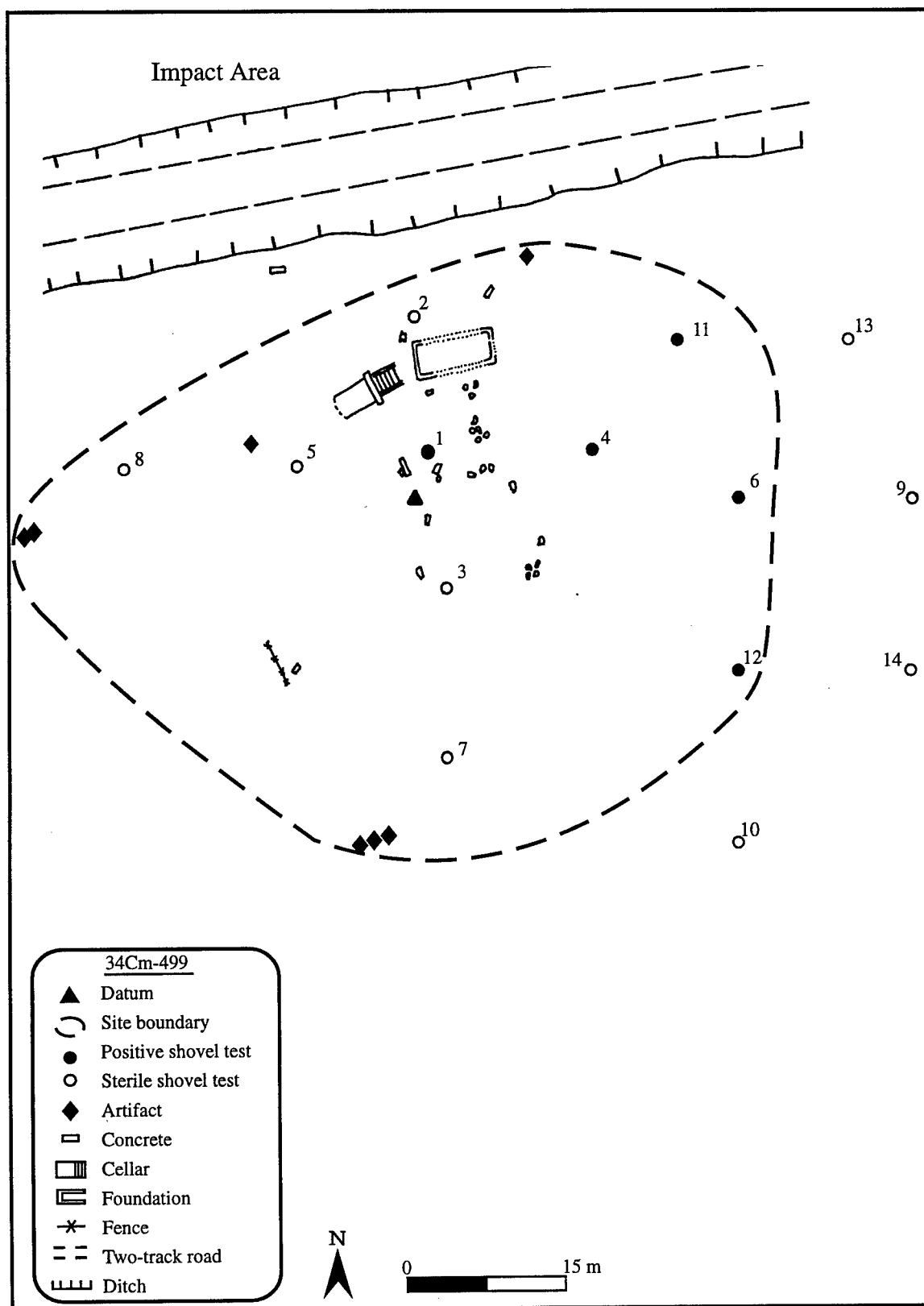


Figure 131. Plan map of site 34Cm-499 (92-140).

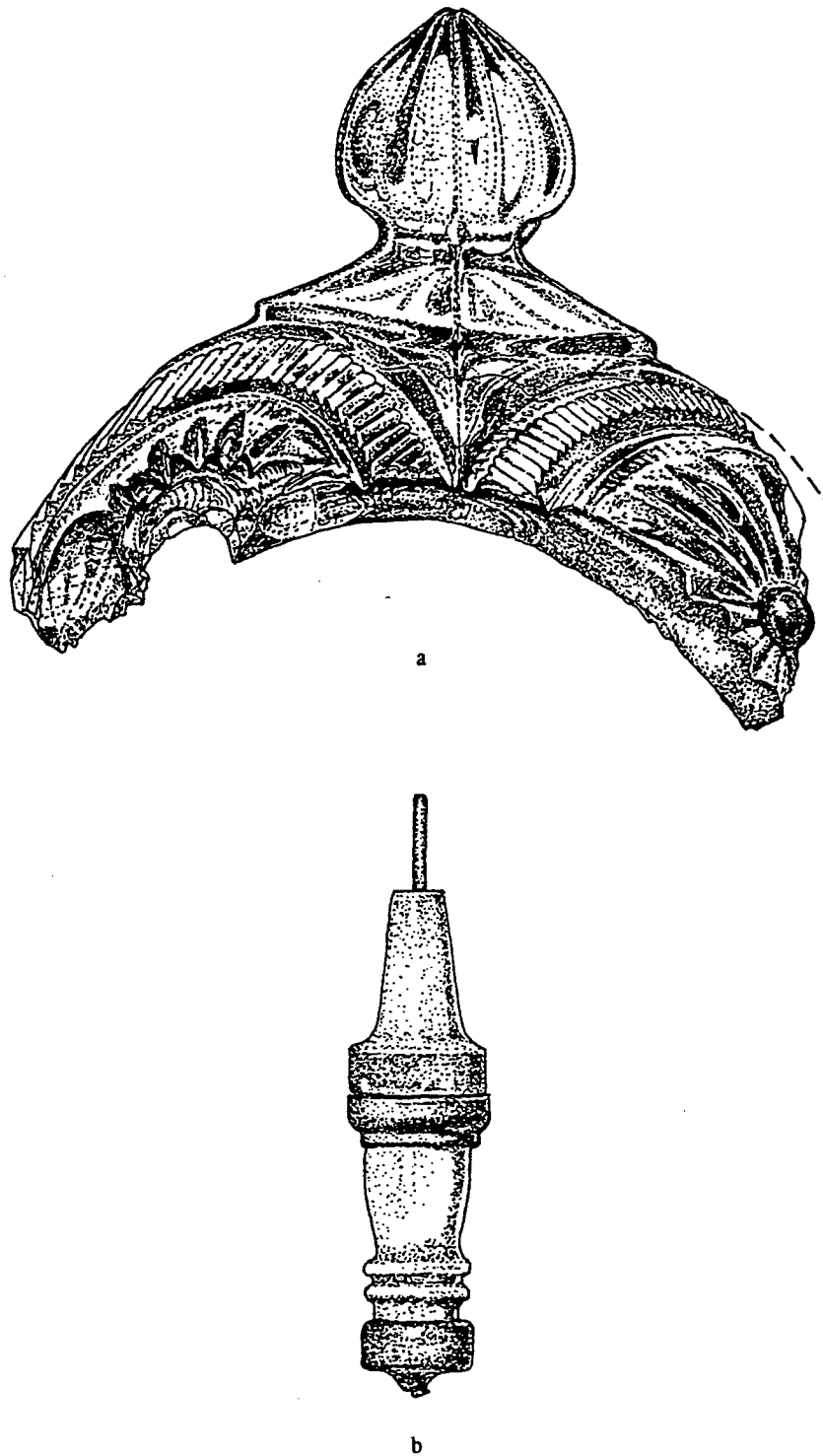


Figure 132. Selected historic artifacts from 34Cm-499: (a) manganese solarized pressed bowl top; (b) Model T spark plug. (Scale 1:1)

Archival Research

This site is located in the southwest quarter of the southwest quarter of the northwest quarter of Section 17, Township 2 North, Range 14 West. The northwest quarter of Section 17 was allotted to Cho-cof-py (Shelby Tenequer), a Comanche (Anonymous n.d.:54; Comanche County *Deed Books* 450:385).

Comanche County *Deed Books* do not indicate how or when Cho-cof-py ceased to be the owner of the northwest quarter of Section 17. The earliest mention of the property in Comanche County *Deed Books* is found in a March 1953 document concerning the disposition of the estate of William O. Parker. The March 1953 entry indicates that Parker had rented the northwest quarter of Section 17 from a Grace Tehauno and her husband Quanah (also spelled Wuanah) Hoohwah (also spelled Hoahwah, Hoshwa, and Hoakwah). Parker's wife Leora (also spelled Laura) inherited the lease as part of her husband's estate (Comanche County *Deed Books* 393:87-89, 445:573-578, 450:385-386; Department of the Army n.d. [ca. 1957]:n.pg.). This Leora/Laura Parker is not the same person as Laura (also called Neda and Ne-dah) Parker Birdsong, daughter of Quanah Parker, and probably is not the same person as Laura Clark Parker, wife of White Parker, one of Quanah's sons.

William and Leora Parker had a daughter named Annie Marcum (Comanche County *Deed Books* 393:87-89, 450:385). In 1956, Tehauno and Hoohwah granted a two-year farming and grazing lease to J. P. Marcum, probably the husband of Annie Marcum. Annie Marcum and Leora Parker, both of Indianahoma, Oklahoma, witnessed signatures on the document (Comanche County *Deed Book* 445:573-578). Although the lease is extremely difficult to read, a notation on the document appears to say that Grace Tehauno and Quanah Hoohwah also resided in Indianahoma (Comanche County *Deed Books* 445:573).

A deed dated April 1957 in the Comanche County *Deed Books* records the sale of the south half of the northwest quarter of Section 17 by Tehauno and Hoohwah to the U.S.A. for \$4,450 (Comanche County *Deed Books* 450:385-386). However, Comanche County *Deed Books* also indicate that the U.S.A. filed a notice of a suit pending for the south half of the northwest quarter of Section 17 in August 1957 (Comanche County *Deed Books* 454:280-283). It seems likely that an error occurred in either the April or August record, and that either the sale or the suit should have been for the north half of the northwest quarter of Section 17. Land acquisition maps from Fort Sill indicate that the south half of the northwest quarter of Section 17 was obtained from Grace Tehauno, and the north half of the northwest quarter of Section 17 from "Quanah Hoakwah" (Department of the Army 1956:n.pg.). Fort Sill real property records list a pond and 160 rods of "4 wire fence on native posts" as improvements on the south half of the northwest quarter of Section 17 at the time of government acquisition (Fort Sill Real Property Office 1959:n.pg.).

Summary

Either Cho-cof-py, Grace Tehauno, or Quanah Hoohwah could be associated with the site. It is also possible the Parkers, the Marcums, or an unrecorded lessee were responsible for the site. Further research in Anadarko is recommended to determine at what date the Native American owners began leasing the land. If Cho-cof-py resided there for an extended period and did not die until the late 1940s, then the site could be of significance. Oklahoma death records would provide information on the age of Cho-cof-py and census records would provide information on where she resided. In addition, further testing of the site is recommended to evaluate fully its potential for inclusion in the NRHP.

Cantonment Area

A parcel of land within the Fort Sill Cantonment Area totaling 110 acres was included as part of this survey project (Figure 133). This survey area included both Ennis Knob and Gunnery Hill and a portion of the Sitting Bear Creek floodplain. Ennis Knob was formed from the same remnant limestone bedrock that underlies McKenzie Hill, while the remainder of the survey area is underlain by sandstone and mudstone conglomerate bedrock. The soil is listed as limestone cobbly land on Ennis Knob, granite cobbly land in the remaining upland areas, and Port clay loam on the Sitting Bear Creek floodplain. Sitting Bear Creek is the only drainage within the survey area other than the small drainages that dissect the flanks of Sitting Bear Creek valley.

No sites have been previously recorded within this survey area, and no new sites were identified. Locality 92-139 was the only cultural resource encountered and consists of two concrete foundations located at the base of Gunnery Hill. No artifacts were associated with these foundations.

CHAPTER 7

SUMMARY OF RESULTS AND RECOMMENDATIONS

by
Floyd B. Largent, Jr., Gathel M. Weston, Duane E. Peter, and Stephen P. Austin

This chapter summarizes the results of the 1992 survey and provides recommendations concerning National Register eligibility and management of the recorded properties. The results section addresses research concerns such as site distribution, site function, and an evaluation of the site detection methodology for the prehistoric assemblages. The historic site summary includes a discussion of the methodology used to date the historic sites.

RESULTS

The survey conducted by GMI from August 1992 to October 1992 located or relocated a total of 77 archeological sites. Among the 77 sites, 40 historic components and 42 prehistoric components were identified. Fourteen of the 77 sites had been previously recorded. Collected artifacts totaled 2,075 specimens, with 1,435 from historic components and 640 from prehistoric components. One site has been recommended as eligible for listing in the National Register of Historic Places (NRHP); the eligibility of 35 sites is unknown at this time; and 41 sites have been determined as ineligible (Table 4).

Prehistoric Sites Summary

Of the 77 sites recorded during the 1992 survey, 42 contained prehistoric components (see Table 4). Twelve of these sites had been previously recorded (34Cm-66, 34Cm-68, 34Cm-75, 35Cm-78, 34Cm-276, 34Cm-284, 34Cm-289, 34Cm-290, 34Cm-303, 34Cm-306, 34Cm-310, and 34Cm-323). Site 34Cm-284, originally recorded as a historic artifact scatter, was found to contain a previously unrecorded Archaic component as well. Sixteen of these sites were identifiable as to temporal/cultural affiliation; the 20 components identified included two Paleo-Indian components, seven Archaic components, and 11 Plains Village components. In nearly all cases, these sites exhibit extreme erosion, or are otherwise unworthy of further work or inclusion in the NRHP. However, the prehistoric component recorded at the original location of Quanah Parker's Star House, site 34Cm-454, has been recommended along with the historic component for further testing and preservation, as has the prehistoric component at 34Cm-480, which was recorded primarily as a historic saloon.

Table 4
Recommendations and Eligibility of Sites Recorded During the Current Survey for Inclusion in the National Register of Historic Places

Site #	Site Area (m ²)	Site Function	Temporal Affiliation	NRHP Eligibility	Site Management
34Cm-66	2600		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-68	4000		Plains Village Post World War II	Ineligible	No Further Work
34Cm-75	120		Plains Village 1890-1960	Ineligible	No Further Work
34Cm-78	115		Plains Village	Ineligible	No Further Work
34Cm-162	11,000	Military Dump	World War I	Unknown	Archival Work, Testing
34Cm-276	140		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-284	5800		Archaic World War I	Ineligible	No Further Work
34Cm-289	indeterminable		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-290	indeterminable		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-303	330		Archaic and Plains Village	Ineligible	No Further Work
34Cm-306	1450		Plains Village	Ineligible	No Further Work
34Cm-310	20,000		Prehistoric Unknown	Ineligible	No Further Work

Table 4 (Cont'd)

Site #	Site Area (m ²)	Site Function	Temporal Affiliation	NRHP Eligibility	Site Management
34Cm-323	900		Prehistoric Unknown	Ineligible	No Further Work
34Cm-358	12,000	Ranch	Early 20th century	Unknown	Archival Work, Testing
34Cm-441	3710	Farmstead	Late 19th-Early 20th century	Ineligible	No Further Work
34Cm-442	2000	Cabin	Early-Mid 20th century	Ineligible	No Further Work
34Cm-443	6200	Park Pool	Early-Mid 20th century	Eligible	Preservation
34Cm-444	2860	Cabin	Early-Mid 20th century	Unknown	Further Archival Work
34Cm-445	5000		Plains Village	Ineligible	No Further Work
34Cm-446	3135	Farmstead	Late 19th century	Unknown	Archival Work, Testing
34Cm-447	37,500		Archaic and Plains Village	Unknown	Testing
34Cm-448	2600		Plains Village	Ineligible	No Further Work
34Cm-449	1800	Possible Farmstead	Historic-Unknown	Ineligible	No Further Work
34Cm-450	3300	Farmstead	Late 19th century	Unknown	Archival Work, Testing
34Cm-451	5700	Farmstead	Late 19th century	Ineligible	No Further Work
34Cm-452	3300		Prehistoric-Unknown	Ineligible	No Further Work

Table 4 (Cont'd)

Site #	Site Area (m ²)	Site Function	Temporal Affiliation	NRHP Eligibility	Site Management
34Cm-453	7200		Plains Village	Ineligible	No Further Work
34Cm-454	6300	Quanah Parker Residence	Prehistoric-Unknown 1894-1957	Unknown	Archival Work, Testing, Preservation
34Cm-455	2800		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-456	7500	Farmstead	Late 19th-Early 20th century	Unknown	Archival Work, Testing
34Cm-457	300		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-458	450		Prehistoric-Unknown	Unknown	Testing
34Cm-459	3200		Archaic	Unknown	Testing
34Cm-460	1000	Dump	Archaic 1910-1960	Unknown	Testing, Preservation
34Cm-461	200		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-462	320		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-463	1250		Paleo-Indian	Ineligible	No Further Work
34Cm-464	25,000	Farmstead	Late 19th-Early 20th century	Unknown	Testing
34Cm-465	50		Prehistoric-Unknown	Unknown	Mechanical testing
34Cm-466	5200		Prehistoric-Unknown	Ineligible	No Further Work

Table 4 (Cont'd)

Site #	Site Area (m ²)	Site Function	Temporal Affiliation	NRHP Eligibility	Site Management
34Cm-467	4000		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-468	4600	Farmstead	Late 19th-Early 20th century	Unknown	Archival Work, Testing
34Cm-469	1800		Prehistoric-Unknown Late 19th-Early 20th century	Ineligible	No Further Work
34Cm-470	600		Plains Village	Ineligible	No Further Work
34Cm-471	indeterminable		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-472	2000	Farmstead	Late 19th-Early 20th century	Unknown	Archival Work, Testing
34Cm-473	3800		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-474	5500		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-475	57,500		Paleo-Indian and Archaic	Unknown	Testing
34Cm-476	600		Prehistoric-Unknown	Unknown	Mechanical Testing
34Cm-477	8800		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-478	8500		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-479	3500		Archaic and Plains Village	Ineligible	No Further Work

Table 4 (Cont'd)

Site #	Site Area (m ²)	Site Function	Temporal Affiliation	NRHP Eligibility	Site Management
34Cm-480	120000	Saloon & Cabins	Prehistoric-Unknown Late 19th-Early 20th century	Unknown	Archival Work, Testing, Further survey
34Cm-481	9900	Farmstead	Late 19th-Early 20th century	Unknown	Preservation
34Cm-482	3000	Farmstead	Late 19th-Early 20th century	Unknown	Archival Work, Testing
34Cm-483	50,000		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-484	800		Plains Village	Unknown	Testing
34Cm-485	14,000	Farmstead	Late 19th-Early 20th century	Ineligible	No Further Work
34Cm-486	15,000	Farmstead	Late 19th-Early 20th century	Unknown	Archival Work, Testing
34Cm-487	1,250		Prehistoric-Unknown	Unknown	Testing
34Cm-488	5175	Farmstead	Late 19th-Early 20th century	Unknown	Archival Work, Testing
34Cm-489	6400	Farmstead	Early-Mid 20th century	Unknown	Archival Work, Testing
34Cm-490	2375		Prehistoric-Unknown	Ineligible	No Further Work
34Cm-491	3375	Farmstead	Early-Mid 20th century	Ineligible	No Further Work
34Cm-492	7000	Farmstead	Early-Mid 20th century	Unknown	Archival Work, Testing, Preservation
34Cm-493	12,000	Farmstead, Blacksmith	Early-Mid 20th century	Unknown	Archival Work, Testing

Table 4 (Cont'd)

Site #	Site Area (m ²)	Site Function	Temporal Affiliation	NRHP Eligibility	Site Management
34Cm-494	5600	Farmstead	Early-Mid 20th century	Unknown	Archival Work, Testing
34Cm-495	3800	Farmstead	Early-Mid 20th century	Unknown	Archival Work, Testing
34Cm-496	6500	Farmstead	Late 19th-Early 20th century	Unknown	Archival Work, Testing
34Cm-497	750	Cabin	Early-Mid 20th century	Unknown	Archival Work
34Cm-498	4400	Farmstead	Prehistoric-Unknown Early 20th century	Unknown	Archival Work, Testing
34Cm-499	5000	Farmstead	Late 19th-Early 20th century	Unknown	Archival Work, Testing
34Cm-500	6200	Tavern	Early 20th century	Unknown	Archival Work, Testing
34Cm-501	590	Mine shaft	Early 20th century	Ineligible	No Further Work
34Cm-502	15	Mine shaft	Early 20th century	Ineligible	No Further Work
34Cm-503	2000	Boy Scout Dormitory	Early 20th century	Unknown	Archival Work

* Indeterminable due to presence of unexploded ordnance

Seven other prehistoric sites (34Cm-447, 34Cm-458, 34Cm-459, 34Cm-465, 34Cm-475, 34Cm-476, 34Cm-484, and 34Cm-487) have been recommended for additional testing, as has the prehistoric component at site 34Cm-460. Sites 34Cm-458, 34Cm-465, 34Cm-476, and 34Cm-487 are of unknown affiliation; 34Cm-459 and 34Cm-460 are Archaic; 34Cm-475 contains Paleo-Indian and Archaic components; and 34Cm-484 is Plains Village in nature.

The site locational data for the 33 newly recorded prehistoric and multicomponent sites discovered during the 1992 Fort Sill survey, as well as the new prehistoric information for site 34Cm-284, have been analyzed and added to the existing prehistoric data base, which was presented in its entirety in Volume I of this technical series (Peter and Weston 1993). Ten of the 33 new sites (seven single component sites and three multicomponent sites) have been assigned cultural/temporal affiliations, consisting of 13 separate components. The components are primarily Archaic and Plains Village in age, with five Archaic components and six Plains Village components identified. In addition, two components have been identified as Paleo-Indian in age. The prehistoric data base now includes information on 106 sites, 38 (24 single component sites and 14 multicomponent sites) of which contain a total of 62 separate components. The 62 identifiable components include three Paleo-Indian components, 25 Archaic components, six Archaic/Woodland components, and 28 Plains Village components (Table 5).

Table 5
Geographical Location of Prehistoric Components of 38 Recorded Sites

Component	Riverine	Upland	Slope Base	Total
Paleo-Indian	2	1	0	3
Archaic	13	5	7	25
Archaic/Woodland	5	0	1	6
Plains Village	<u>12</u>	<u>5</u>	<u>11</u>	<u>28</u>
Total	32	11	19	62

Site locations and settlement patterns remain one of the elusive research goals for archeologists in this region, even though several large projects have attempted to address the issues. It is a common belief that populations dependent on horticulture tend to establish their primary habitations near rich bottomlands (Wyckoff and Brooks 1983:65). However, the settlement patterns reflected by other cultural groups are not as well understood.

Bastian (1965), in his examination of the Middle Cache Creek area, discovered that the prehistoric occupations tended to be located close to the channel, usually on or near terraces or other elevated areas. However, that does not mean that Bastian's sites had been primarily occupied by horticulturalists. We know, for example, that Archaic populations also utilized these areas extensively (e.g., the Gore Pit site). Moreover, Bastian's finding does not necessarily mean that these locations were the primary settlement locations. He further stated that more work was needed before it could be determined whether the focus on bottomlands reflected an actual settlement pattern or an archeological bias toward the documentation of

sites in these areas due to erosional activity or increased surveillance of these areas by professional and avocational archeologists.

Northcutt's (1980) examination of site locations on the Big Beaver drainage allowed him to define four topographic settings: hilltops, high ridge tops, low terraces, and floodplains. His survey results indicated that one-half of the sites were located on low terraces and that the remaining sites were equally distributed in the floodplains and on the surrounding hilltops. No sites were discovered on high ridge tops.

Preliminary results from the recently completed Cotton County survey (Anderson and Bearden 1992) indicate that although fewer sites may be found on high ridge tops, prehistoric and historic populations utilized most, if not all, of the topographic settings. It should be noted, however, that site types in the upland areas are often different from those in other topographic settings in that many reflect more specialized activity sites or short-term occupations. These site types are primarily low density artifact scatters.

For this report, the 106 prehistoric sites selected for analysis were placed in one of three topographic settings: riverine, upland drainage, and slope base. The riverine location contains all sites located on or adjacent to creeks and their floodplains. Upland drainage sites are located along small, intermittent, low order streams or on low ridges between such streams. Slope base sites are those upland sites located at the base of major topographic uplands such as Quanah Mountain or Rabbit Hill.

The data collected in Table 5 indicate that riverine environments support the largest number of identifiable prehistoric components ($n=32$), with slope base environments running a poor second ($n=19$). Plains Village and Archaic sites have similar distributions in all three environments; they are most heavily concentrated in riverine and slope base environments, with a minimal representation in upland settings. Plains Village sites are equally represented in riverine and slope base settings; however, the Archaic sample is biased toward riverine environments. Artifacts assignable to the Paleo-Indian and Woodland periods are so sparse that temporal assignments are at best considered tentative, making any discussion of site distribution for these periods premature.

When all 106 sites are plotted against environmental settings (Table 6), the results are somewhat different; riverine environments are still the most common ($n=51$), but in this case upland sites ($n=33$) outnumber slope base sites ($n=22$). The largest percentage of prehistoric sites occurred on granite cobbly land and other rocky soils, including stony rock land, rock land, and granite outcrop ($n=45$). As is illustrated in Table 6, Port series soils, including Port loam, Port clay loam, and Port Slickspots complex, are also well-represented ($n=23$), as are Vernon soils ($n=21$). Six other soil types, eroded clayey land, Lawton loam, Windthorst sandy loam, breaks-alluvial land, Zaneis-Slickspots complex, and Foard-Slickspots complex, account for the remaining 16 prehistoric sites.

The predictive model presented by the Museum of the Great Plains (Ferring 1978:118-163) was based primarily on soil type, and was developed from a data base that is similar to that used for the current analysis. In the Museum model, sites were predicted to occur on the three most common soil types: Port series soils, granite cobbly soils, and Vernon soils. Environmental variables such as presettlement vegetation and topographic location were not taken into account. A second variable was included, the rank of drainage size on which the site was located, but since there was often a direct correlation between soil type and stream size, the use of this second variable added little to the model.

Table 6
Soil Type Associated with Selected Prehistoric Sites at Fort Sill

Soil Type	Riverine	Upland	Slope Base	Total
granite cobbly land	18	7	12	37
stony rock land	0	1	3	4
rock land	0	2	2	4
granite outcrop	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>
Subtotal	18	10	18	46
Port loam/Port clay loam	20	1	0	21
Port Slickspots complex	<u>1</u>	<u>1</u>	<u>0</u>	<u>2</u>
Subtotal	21	2	0	23
Vernon soils	5	16	0	21
eroded clayey land	0	0	1	1
Lawton loam	4	1	1	6
Windthorst sandy loam	0	1	0	1
breaks-alluvial land	1	0	2	3
Zaneis-Slickspots complex	0	2	0	2
Foard-Slickspots complex	<u>2</u>	<u>1</u>	<u>0</u>	<u>3</u>
Subtotal	7	5	4	16
Total	51	33	22	106

The model generated by the Museum of the Great Plains has a number of difficulties associated with it. The first is that the model was developed from surface observations with little, if any, data generated from subsurface testing. This has resulted in a predictive model that does little more than suggest where sites will be found during low intensity survey with no subsurface testing, i.e., in areas with good surface visibility. A second problem is that the model was tested by sampling from survey units that were predicted to have the highest frequency of sites without a corresponding sample of units predicted to have

a low frequency of sites. Without a sample from all the different types of survey units expected within the investigated area, it is difficult to assess the validity of this model. The need to assess the validity of this predictive model must be taken into consideration when designing future survey efforts.

The current 106-site sample located a majority of prehistoric sites on granite cobbly and related rocky soils; Port series soils, including Port loam, Port clay loam, and Port-Slickspots complex, are also well-represented, as were Vernon soils. These results are quite similar to those of the predictive model from the Museum of the Great Plains; indeed, all the predicted soil types are heavily represented in the actual sample. The new data, based on a substantial sample representing a significant percentage of the prehistoric sites known for Fort Sill, are supportive of the original model as presented by Ferring (1978). However, these data should still be considered tentative at this time. Even with the more intensive survey methods used during the current survey, including subsurface testing (see discussion of intensive shovel testing below), sites tended to be identified primarily on land with good surface visibility. Two possible conclusions are that shovel testing does not offer any significant advantage when conducting survey in the Fort Sill area, or that the criteria used to determine the locations subject to shovel testing are in error.

Historic Sites Summary

In this section of the summary, an overview of the historic sites recorded during this survey and the criteria by which each of these sites were evaluated are presented. Sites with national, state, or local significance are discussed briefly in reference to their historic context. Sites of unknown function or of known function but lacking contextual integrity are not discussed.

Forty of the 77 sites located during the current survey at Fort Sill contain a historic component. Five of these sites (34Cm-68, 34Cm-75, 34Cm-162, 34Cm-284, and 34Cm-358) had been previously recorded as Euro-American sites, or as multicomponent sites containing Euro-American remains. Twenty-three of these sites (57.5 percent) have been identified as rural dwellings or farmsteads; five (12.5 percent) are special activity sites related to Craterville Park; three (7.5 percent) are commercial sites; two (5 percent) are refuse areas; two (5 percent) are industrial sites (mining areas in this case); one (2.5 percent) represents the remains of a ranch; and four sites (10 percent) are of unknown function (see Table 4).

The criteria for the evaluation of these historic sites when making recommendations for NRHP inclusion or testing made use of several sources of information. Critical to the primary assessment was the historical significance of each site and the site's ability to conform to research criteria. Importantly, the limitations and realities of an ability to protect a valid sample of certain site types from further impacts by the conduct of the military mission is included in the assessment. Data collected from archival sources, assumed site integrity and existing features, recovered material, and current and projected impacts near the site location were also critical in making the recommendations for NRHP inclusion or testing. A site with foundation features but with no stratified deposition or significant surface material certainly must be classified as lacking significant data sets critical to historical research in southwestern Oklahoma. However, sites with significant surface features, apparently intact subsurface deposition, and adequate documentation would provide a significant data base.

The assignment of mean beginning dates, that is, estimates of the initial historic use or occupation of a location, was possible for ten of the sites recorded by the survey. These sites, all of which were first recorded during the 1992 survey, had sufficient material with which to assign a diagnostic date based on the artifact assemblages from the shovel testing, the surface collection, or both. Each date was placed

against both the archival date and the predicted dates for the sites (if known). The estimated dates for five of these ten sites are within three years of the archival dates, and two of the sites are within a range of nine years. Three sites were within a 32-year range. A brief summary of sites with diagnostic dates, archival dates, predicted dates, and the range of error is presented in Table 7.

Table 7
Diagnostic Dates with Error

Site	Diagnostic Date	Archival Date	Predicted Date	Error
34Cm-444	1890	1922	1901	- 32
34Cm-454	1903	1894	1894	+ 9
34Cm-460	1919	Unkn	1922	- 3
34Cm-464	1892	1895	1895	- 3
34Cm-472	1893	Unkn	1901	- 8
34Cm-480	1903	Unkn	1901	+ 2
34Cm-481	1922	1947	1947	- 25
34Cm-486	1928	1901	1901	+ 27
34Cm-493	1906	1906	1901	0
34Cm-498	1903	Unkn	1901	+ 2

Historic Farmsteads and Rural Residences

Twenty-three historic farmsteads and one rural residence (the original site of Quanah Parker's Star House) were located during this survey. Sixteen of the farmsteads (34Cm-446, 34Cm-450, 34Cm-456, 34Cm-464, 34Cm-468, 34Cm-472, 34Cm-482, 34Cm-486, 34Cm-488, 34Cm-489, 34Cm-492, 34Cm-494, 34Cm-495, 34Cm-496, 34Cm-498, and 34Cm-499) exhibit significant intact features and contextual integrity worthy of further research concerning the changing social and economic lifeways of southwestern Oklahoma. Each of these sites has been recommended for additional archival research and evaluatory testing in order to better ascertain National Register status. Eleven of the farmsteads (34Cm-446, 34Cm-450, 34Cm-456, 34Cm-464, 34Cm-468, 34Cm-472, 34Cm-482, 34Cm-488, 34Cm-494, 34Cm-496, and 34Cm-498) were apparently occupied by Euro-American settlers. The remaining five farmsteads (34Cm-486, 34Cm-489, 34Cm-492, 34Cm-495, and 34Cm-499) were occupied by Comanche settlers from allotment (pre-1901) until government acquisition (1956-1957). Two of the sites, 34Cm-492 and 34Cm-495, were originally allotted to two of Quanah Parker's wives, Cho-ny and To-pay, and remained in the hands of their families until government acquisition. Indeed, the original site of Quanah Parker's famed Star House, which was constructed in 1894, is located nearby. It was recorded during the 1992 survey as site 34Cm-454. The site retains a number of intact features as well as a prehistoric component that requires further study, and has been recommended for additional archival research, evaluatory testing, and preservation.

One other farmstead, 34Cm-481, is worthy of note. Although it has been established that this site was first occupied in 1947 (see Chapter 6), and thus is not considered to be old enough to represent a historically significant site, 34Cm-481 does contain the well-preserved remains of one of the last farmsteads constructed within the confines of the Fort Sill Military Reservation, and thus contains material from a short occupation. This site may be of potential value to future researchers, and should therefore be aggressively protected from further disturbances.

Ranch

Site 34Cm-358, which is located on the banks of Blue Beaver Creek, consists of the remains of a historic ranch known as Ketch Ranch. Eleven features, including several building foundations, holding pens, a pump house, and a storm shelter, have been recorded for this site by GMI and previous researchers. Although the site has suffered some surficial disturbance, primarily from military foot traffic, such disturbance seems to be minor. This site has good potential for containing intact cultural deposits relating to one of the largest ranches operated in this area. Further testing as well as additional archival research is recommended to evaluate fully this site's potential for inclusion in the NRHP.

Refuse Areas

Two refuse areas, or dumps, were recorded during the 1992 Fort Sill survey. These sites include the Camp Doniphan dump (34Cm-162) and another dump (34Cm-460) connected to Craterville Park (see Chapter 3) and a more recent military occupation. The Camp Doniphan dump dates from the World War I era, and has been recommended for further testing and archival research due to its potential for yielding valuable information concerning the military training conducted at nearby Camp Doniphan. The Craterville Park dump, on the other hand, has suffered extensive disturbance. It, too, has been recommended for additional testing, but such testing should be designed to evaluate its prehistoric Archaic component rather than its historic component.

Industrial Sites

The industrial sites recorded during this survey include two small mining operations (34Cm-501 and 34Cm-502). Mining in the Wichita Mountains sustained a number of the early settlers in this region of Oklahoma; unfortunately, while these sites present opportunities to examine early industry in southwestern Oklahoma, they are of minimal value and have yielded no useful information concerning the industry. Both sites have been declared ineligible for inclusion in the NRHP; therefore, no further work is recommended at either.

Commercial Sites

Three sites located during the 1992 survey are classified as commercial sites. Actually, each of these sites included both commercial and residential properties; in each case, they were farmsteads that were later used for commercial purposes. Site 34Cm-480 consists of a very large site (527,500 m²) that contains the remains of the Rose Mountain Saloon, an early twentieth century establishment, with attached cabins and associated trash dumps. This site also includes the residence of the proprietor, one Frank Wisely. The

quarter-section containing site 34Cm-493, the Blacksmith Sexon farmstead, was originally allotted to Harold Parker, one of Quanah Parker's sons. This site was operated as a smithy by one of its Euro-American tenants, Marshall Sexon or Sexton, in the mid-twentieth century. Sexon, who was reputed to be a distant relative of Quanah Parker, later became an owner of the property. The third site, 34Cm-500, represents the remains of the Birdsong Tavern, a business operated in the early 1900s by Aubra Birdsong, Quanah Parker's Euro-American son-in-law and Neda Birdsong's father. The house was either attached to or part of the tavern. All three of these commercial sites (34Cm-480, 34Cm-493, and 34Cm-500) have been recommended for additional archival research and testing.

Special Activity Areas

Five sites (34Cm-442, 34Cm-443, 34Cm-444, 34Cm-497, and 34Cm-503) represent special activity areas connected with Craterville Park, a regional amusement park that operated in the Mount Scott area from 1922 until 1956, when the land was acquired by the federal government. Three of the sites (34Cm-442, 34Cm-444, and 34Cm-497) contain the remains of rental cabins that once existed at the park. Two of these cabins, 34Cm-444 and 34Cm-497, are intact enough to prompt a recommendation of further archival research. One of the remaining two sites recorded for Craterville Park, 34Cm-503, represents the remains of a Boy Scout dormitory that was used extensively from the 1930s to the mid-1950s; it has also been recommended for additional archival work. The final Craterville Park site, 34Cm-443, consists of the remains of the Craterville Park pool. The pool was created by the construction of a small dam on Crater Creek, approximately 250 m downstream from the larger dam that forms Canyon Lake. In addition to the remnants of the pool's dam, the bath house foundation, concrete steps leading into the pool, a concrete diving platform, and the possible remains of a pool slide (Medicine Park's pool had a similar slide in 1946) all still exist at this location. Due to its excellent condition, the Craterville Park pool has been designated eligible for inclusion in the NRHP--the only site located during the 1992 survey to be so designated--and is recommended for preservation.

Evaluation of Site Detection Methodology

The survey of approximately 17,068 acres of the Fort Sill Military Reservation presented certain challenges related to both the detection of new sites and the relocation of previously recorded sites. Survey conditions were relatively good, for ground cover was only a problem within the drainage bottoms. It was quickly apparent, however, that the nature of the archeological manifestations at Fort Sill, combined with the impact of over 100 years of military training, have greatly affected the archeological visibility of the previous millennia of occupation.

The relocation of previously recorded sites during the 1992 and previous seasons (e.g., Peter and Weston 1993) contributed to the observation that shovel testing is of limited utility in regard to the detection of new sites. Often, a few artifacts present within an eroded area would be the only evidence of the presence of the formerly recorded site. Shovel testing within and surrounding the surface evidence would most often yield no additional evidence. In other words, without some surface exposure, site detection by means of shovel testing is extremely unlikely. The limited utility of shovel testing for the detection of new sites is directly related to the low artifact densities exhibited by sites in this region. It might be suggested that the shovel test interval was too great for site detection; however, when attempting to relocate sites, the survey crews often placed shovel tests immediately adjacent to surface evidence and shovel test intervals were 15 m or less.

Given the results, site detection would appear to be enhanced only through greater surface exposure. In some areas of the Southwest, disking or plowing has been used to provide sufficient exposure to aid site detection. However, such procedures are unacceptable at Fort Sill due to the unnecessary disturbance of the ground cover and subjection of the exposed areas to erosion. At the present, the only solutions appear to be to schedule survey work when vegetation cover is minimal (i.e., winter months) maximize examination of available exposed areas, and focus shovel testing in those areas judged to have a high probability of containing sites (for example, floodplains of large streams). These guidelines, which were formulated after the analysis of the 1991 survey results (Peter and Weston 1993), were adhered to during the course of the 1992 survey.

Relocation of the previously recorded sites was also affected by the low artifact densities characteristic of the area's sites. Of the 21 previously recorded sites and the six previously recorded ruins within the current project area, 14 sites and four ruins were relocated, or 70.4 percent of the expected total. The ten sites recorded by Shaeffer are reported within the current project area (Shaeffer 1959, 1966), with four (40 percent) of these sites relocated. Another 10 of the 21 sites were originally recorded by the Museum of the Great Plains in 1976 and 1977; in addition, they relocated two of Shaeffer's sites (Ferring 1978). Of these 10 sites located by the Museum of the Great Plains, the current survey relocated nine (90 percent). One site was recorded by the Museum of the Great Plains during their 1983 survey of historic sites in Comanche, Cotton, and Tillman counties (Northcutt et al. 1983). This site, Ketch Ranch (34Cm-358), also was relocated during the current survey. In addition, six ruins were identified by Dames and Moore during the course of their recent terrain analysis of Fort Sill (Dames and Moore 1980). Four of these ruins (66.6 percent) were relocated and were recorded for the first time as archeological sites.

These survey results greatly exceed the recovery rate of 21.2 percent yielded by the 1991 survey, in which 21 of 99 previously known sites were relocated (102 sites were sampled for originally, but three were found to merge into other sites). Several factors likely contributed to the increased recovery level: (1) formulation of new survey strategies; (2) the smaller span of time between original discovery and relocation for most of the sites; (3) increased surface visibility and increased site probability; and (4) variable impacts caused by differential military use of the training areas. It must be stressed that much of the 1992 survey was concentrated in areas, such as the footslopes of the Wichita Mountains, with greater likelihood of containing sites and with greater surface visibility than those areas surveyed previously. The possibility exists that many of the 1992 survey areas were used either less or differently for military training purposes than those areas surveyed in 1991. In addition, it should be noted that although 90 percent of the sites previously recorded by the Museum of the Great Plains were relocated, only 40 percent of those sites identified by Shaeffer (1959, 1961, 1966) were relocated. Most of the Museum's sites have been known for less than 20 years, while the original recordation of Shaeffer's sites occurred more than 30 years ago. Better recordation procedures and lessened impacts due to the shorter time span since recordation have undoubtedly contributed to the greater ability to relocate the Museum of the Great Plains' sites as opposed to those recorded by Shaeffer.

The current GMI survey, unlike the previous one (Peter and Weston 1993), produced approximately equal numbers of prehistoric and historic occupations. Particularly glaring within the site sample is the obvious lack of manifestations of the protohistoric or contact period between 1550 and 1870. As Shaeffer (1959:23-24) aptly notes, early travelers such as Catlin (1926) in the 1830s and Marcy (Marcy and McClellan 1937) in the 1850s noted both the present and former occupancy of the area by the Wichita and the Comanche. After the establishment of Fort Sill in 1869, there are a number of references to Comanche and Kiowa encampments along East Cache Creek (Shaeffer 1959:23). As Shaeffer (1959:24) points out, such components may be identifiable only through excavation, for they are intermixed with assemblages that are

presently recognized as prehistoric in age. However, it must also be realized that such occupations were likely of short duration within a period of less than 300 years. Therefore, the archeological visibility of such components is limited from the start. Given their stratigraphic position on the most recent land surfaces, such components are also those most susceptible to destruction by subsequent cultural activities.

A number of factors have contributed to the inability of the 1991 and 1992 Fort Sill surveys to relocate many of the previously recorded sites, even though these surveys were the most intense and extensive yet conducted on the Fort Sill Military Reservation. One factor is that previous archeological work on the Fort Sill Reservation has affected some of the previously recorded sites. Two sites within the current project area and 10 in the 1991 project area have been the subject of archeological excavations conducted over the last 30 years and other sites have had intense collection pressure from both professional and avocational archeologists. However, excavation and surface collection can only account for a small portion of the sites that were not relocated. A second factor is the poor locational information recorded for some of the earlier sites documented. While this is a convenient explanation, it does not entirely explain why the number of previously recorded sites located within the 1991 and 1992 project areas has been reduced from 134 to less than 40. While exact locations of previously recorded sites may not be known, the larger survey area covered by the current survey should have included most if not all of these 134 sites. Furthermore, reanalysis of some cultural materials collected by Shaeffer (1959) has shown that a significant amount of natural material has not been misidentified as cultural and has not led to the over-reporting of sites. Although contributing to the problem, neither of these two factors are significant causes.

However, three significant factors in the inability of the 1991 and 1992 Fort Sill surveys to relocate previously recorded sites are continuing natural erosion, channelization of stream beds, and military training activities. Many of the sites recorded by Shaeffer were located in the banks of the creeks. While natural erosion allowed these sites to be recorded in the first place, continuing erosion over the 30 years since has destroyed some of these sites. This continuing erosion should uncover previously unexposed sites, but channelization of many of the creeks at Fort Sill has slowed or stopped this process. Channelization has destroyed a number of previously recorded sites, and undoubtedly unrecorded sites, and has slowed or stopped the erosion process that previously had revealed these sites. However, these two factors can only help explain the disappearance of sites adjacent to stream channels. The more wide scale disturbances attributable to military training activities are the primary cause of site destruction or site masking. As a military training facility, Fort Sill has a major responsibility for preparing members of the armed services for their role in defending the interests of the federal government and its people. Unfortunately, this mission often involves the modification of the land surface, which results in either the disturbance of site contexts or masking of site contexts by fill materials.

This pattern of disturbance of site contexts was found repeatedly throughout the areas examined by the current survey. Disturbances from military activities were noted on all but five of the recorded sites, with 53.2 percent of all sites disturbed within the six months preceding observation (Table 8). At least 27.3 percent of the sites exhibit extensive subsurface disturbance not related directly to natural erosion. It is obvious that military training activities have severely impacted the cultural resources located on the Fort Sill Military Reservation.

Intensive Shovel Testing

As a partial test of the site distribution model developed by the Museum of the Great Plains in the 1970s (Ferring 1978), and as a test of the effectiveness of shovel testing in general, a portion of Survey Area 11

Table 8
Degree of Disturbance to Cultural Resource Sites, Fort Sill, Oklahoma

Site	Type of Impact	Nature of Impact
<i>Area 1</i>		
34Cm-306	Disturbed by military within last 6 months	Erosion, firebreak maintenance, traffic
34Cm-488	Disturbed by military within last 6 months	Training, vandalism
<i>Area 2</i>		
34Cm-75	Disturbed by military and previous research	Erosion, collected
34Cm-323	Disturbed	Erosion and previous excavations
34Cm-441	Disturbed by military	Construction, training
34Cm-445	Disturbed by military within last 6 months	Erosion, vehicular and foot traffic
34Cm-446	Disturbed by military	Bulldozed, building removal
34Cm-460	Disturbed by military within last 6 months	Construction, bulldozing
34Cm-461	Disturbed by military	Road construction, erosion
34Cm-462	Disturbed by military	Road construction, erosion
34Cm-464	Disturbed by military	Road construction, building removal, erosion
<i>Area 3</i>		
34Cm-276	Disturbed by military within last 6 months	Erosion, training
34Cm-454	Disturbed by military	Building removal, erosion
34Cm-455	Disturbed by military within last 6 months	Traffic, latrine and pond construction troops
34Cm-467	Disturbed by military within last 6 months	Firebreak maintenance
34Cm-473	Disturbed by military within last 6 months	Training, vehicle traffic, foot traffic
34Cm-474	Disturbed by military within last 6 months	Training, vandalism
34Cm-479	Disturbed by military within last 6 months	Training, vandalism
34Cm-480	Disturbed by military	Bulldozer activity
34Cm-482	Disturbed by military	Erosion and foot traffic
34Cm-483	Disturbed by military within last 6 months	Firebreak maintenance
34Cm-484	Disturbed by military within last 6 months	Firebreak maintenance, fence construction
34Cm-489	Disturbed by military	Possibly bulldozed, vandalized
34Cm-490	Disturbed by military within last 6 months	Firebreak maintenance
34Cm-492	Disturbed by military	Building removal
34Cm-493	Disturbed within last 6 months	Plowing, training
34Cm-494	Disturbed by military	Training
34Cm-495	Disturbed by military	Erosion, training
34Cm-496	Disturbed by military	Building removal, training
34Cm-498	Disturbed by military	Building removal, training
34Cm-500	Disturbed by military	Building removal, training

Table 8 (cont'd)

Site	Type of Impact	Nature of Impact
34Cm-501	Disturbed by military	Erosion, training
34Cm-502	Disturbed by military	Erosion, training
<i>Area 4</i>		
34Cm-289	Disturbed by military within last 6 months	Training, explosives
34Cm-290	Disturbed by military within last 6 months	Training, explosives
34Cm-162	Disturbed by military within last 6 months	Training, construction of Lawton aqueduct
34Cm-284	Disturbed by military	Borrowing and associated erosion
34Cm-310	Disturbed by military within last 6 months	Training, earthmoving activities, road construction, setting of military marker
34Cm-449	Disturbed by military	Training, erosion
34Cm-450	Disturbed by military	Training, erosion
34Cm-451	Disturbed by military within last 6 months	Military traffic, building removal, training
34Cm-465	Disturbed	Earthmoving activities
34Cm-466	Disturbed by military within last 6 months	Military traffic, erosion
34Cm-471	Disturbed by military within last 6 months	Training, explosives
34Cm-472	Disturbed by military	Training, road construction
34Cm-475	Disturbed by military	Training, pond construction, road construction
34Cm-476	Disturbed	Construction of Lawton aqueduct
34Cm-477	Disturbed by military	Training, erosion
34Cm-478	Disturbed by military in last 6 months	Training, vehicular traffic, borrowing
<i>Area 5</i>		
34Cm-66	Disturbed by military within last 6 months	Training, road construction, collecting
34Cm-68	Disturbed by military within last 6 months	Training, road construction, vehicular traffic
34Cm-358	Disturbed by military within last 6 months	Building removal, foot traffic
34Cm-453	Disturbed by military within last 6 months	Training, road construction, vehicular traffic
34Cm-470	Disturbed by military within last 6 months	Training, road construction
<i>Area 6</i>		
34Cm-78	Disturbed by military within last 6 months	Erosion, military activity
34Cm-303	Disturbed by military within last 6 months	Erosion, military training, foxholes
34Cm-442	Disturbed by military within last 6 months	Erosion, bulldozing, vehicle traffic, training
34Cm-443	Disturbed by military	Viet Nam training facilities
34Cm-444	Disturbed by military within last 6 months	Training, erosion
34Cm-447	Disturbed by military within last 6 months	Training, vehicle traffic, firebreak maintenance

Table 8 (cont'd)

Site	Type of Impact	Nature of Impact
34Cm-448	Disturbed by military within last 6 months	Training, vehicular traffic
34Cm-458	Undisturbed	
34Cm-459	Disturbed by military within last 6 months	Firebreak maintenance, training
34Cm-463	Disturbed by military within last 6 months	Vehicular and foot traffic, training
34Cm-468	Disturbed by military	Training
34Cm-469	Disturbed by military within last 6 months	Training, latrine excavation, foxholes
34Cm-497	Disturbed by military within last 6 months	Training, barracks construction
34Cm-503	Disturbed by military within last 6 months	Training, firing point construction
<i>Area 7</i>		
34Cm-452	Disturbed by military	Training, erosion
34Cm-456	Disturbed by military	Building removal, erosion
34Cm-457	Disturbed	Erosion
<i>Area 11</i>		
34Cm-481	Disturbed by military	Building removal
34Cm-485	Disturbed by military within last 6 months	Firebreak maintenance, powerline construction
34Cm-486	Disturbed by military	Building removal
34Cm-487	Disturbed by military within last 6 months	Firebreak maintenance, powerline construction
34Cm-491	Disturbed by military within last 6 months	Road construction, military traffic, erosion
34Cm-499	Disturbed by military	Fenceline and pond construction

was subjected to intensive rather than selective shovel testing. This survey area was selected because of its proximity to Post Oak Creek and the wide variety of soil types contained within it. Soils recorded for this area include Port loam and granite cobbly land (both predicted by the site distribution model to have a high frequency of prehistoric sites), as well as Foard-Slickspots complex, Lawton loam, breaks-alluvial land complex, Whitethorst sand loam, and Konawa loamy fine sand (soil types that are predicted to have a low frequency of prehistoric sites). Shovel testing was conducted in 30-m intervals and all sediments were screened through 6.35 mm (¼ in) hardware cloth.

The intensive shovel testing resulted in 1,470 shovel test units being excavated in an area of approximately 160 acres. Three sites were recorded within this area during survey. Historic site 34Cm-485 was identified from archival sources and located by surface observation. Shovel testing at this site was instrumental in defining its southern boundaries but did not aid in the location of the site itself. Historic site 34Cm-491 was located by surface observation and no cultural material was recovered through shovel testing. Site 34Cm-487, the only prehistoric site recorded in this area, was also discovered through surface observation, and no cultural material was recovered during shovel testing of this site. In addition, outside of cultural material recovered at site 34Cm-485, only one cultural item was found in a shovel test in this

area, a single piece of vessel glass not associated with any other cultural material. This item was recorded as an isolate.

The pattern observed during intensive shovel testing was repeated in areas subjected to selective shovel testing. During the 1992 survey of the Fort Sill Military Reservation no new sites were located based on shovel testing, while only one previously recorded prehistoric site was relocated solely through shovel testing. All historic sites were identified by either archival research or by the observation of surface artifacts and features. With the exception of the one site mentioned above, all prehistoric sites were located by the observation of surface material.

Shovel testing proved to be an ineffective method for locating archeological deposits in the environment encountered at the Fort Sill Military Reservation. The reason for this ineffectiveness is not grounded in the methodology used to conduct shovel testing, or within the practice of shovel testing itself. This is shown by the results of a similar project conducted at Camp Gruber in eastern Oklahoma in the fall of 1992. This project was supervised and conducted by the same GMI personnel that participated in the Fort Sill survey. However, selective shovel testing conducted as a portion of this project resulted in the recording of a number of prehistoric sites. Within the forested environment encountered at Camp Gruber, shovel testing proved to be an effective method for site location.

The apparent reason that shovel testing is ineffective in locating archeological sites at Fort Sill is the inability to quickly and efficiently conduct shovel testing in this environment. Even though the spring and early summer of 1992 were unusually wet in western Oklahoma, the late summer and fall seasons during which this survey was conducted were dry. This resulted in dry, sun-baked surface sediments that were often impenetrable with standard shovels. Pick axes were used on some occasions, but these too proved ineffective. Pick axes were only able to penetrate to approximately 30 cm bs unless a much larger hole was excavated than is generally standard in the field of archeology. The use of larger, uncontrolled excavations for survey is ineffective, costly, and destructive to the archeological resource. While pick axes were instrumental in the testing of newly located sites, it was not found to be effective in the initial location of these sites.

While shovel testing proved to be an inadequate method for the *location* of archeological sites at Fort Sill, it has proven effective in *defining* site boundaries and the depth of deposits. However, in upland settings, surface observation appears to be an effective method for the identification of archeological sites, especially for historic sites when used in conjunction with archival resources. For areas that potentially contain alluvial or colluvial deposits, shovel testing is not an effective method for locating archeological sites. Standard survey methods in these areas will have to be supplemented by mechanical trenching. In addition, it will be necessary for an archeologist to monitor ground-disturbing projects within areas containing alluvial and colluvial deposits.

Due to the general lack of results from the intensive shovel testing of a 160-acre section of Survey Area 11, it must be stated once again that the site distribution model presented by the Museum of the Great Plains can neither be accepted nor rejected at this time. This intensive testing was not designed primarily to be a test of the model and used a method, shovel testing, that is not effective as a test of the model. It should be noted, however, that 62.5 percent of the prehistoric sites recorded during the 1992 survey were located on soils predicted to have a high frequency of prehistoric sites and another 20 percent were located on, or, generally associated with, soils predicted to have a high frequency of sites (i.e., heavily eroded soils similar to granite cobbly land). Only 17.5 percent of the prehistoric sites were located on soils predicted to have a low frequency of prehistoric sites. While this can not be interpreted as a test of the predictive

model since no attempt was made to scientifically sample the different soil types, it does tend to support it. However, it is believed that it is not the soil types that are responsible for the observed site distribution, but their topographical location.

Obviously, additional research remains to be done in order to finally prove or disprove the assumptions underlying the model. Specifically, future research efforts need to be directed toward clarifying the location of the sites of Fort Sill, with intensive survey efforts directed toward locations less affected by erosion. Two objectives should be kept in mind when designing and conducting future research efforts. The first objective should be to refine or refute the predictive model developed by the Museum of the Great Plains. Future refinement of this predictive model should be directed toward the correlation of soil types, land forms, and site location. The second objective should be to accurately assess the utility of shovel testing in the Fort Sill area; the intensive shovel testing conducted during the current survey has made a start of this effort.

The final test of the model will occur once the basic survey of the entire fort is completed in 1993. At that time, all accessible survey on the fort will be accounted for, and the discovered archeological sites will be included in a rough data base from which more substantial conclusions may be drawn. Once all survey information is included in this data base, additional testing and mitigation will serve as a means of refining the basic model. The current efforts, resulting in the new data presented in this report, should be considered as merely the beginning of the process of testing and refining the existing predictive model for Fort Sill.

RECOMMENDATIONS

An initial assessment of the NRHP eligibility of each cultural property recorded was presented along with the description of the property in Chapter 6. The following section is intended to present a more detailed discussion of the NRHP criteria and a summary of the assessments of each identified cultural resource property in relation to its potential for fulfilling these criteria. In addition, recommendations for the future treatment of each resource are also presented.

Although full assessment of NRHP potential cannot be completed for all properties during this phase of investigations, each property may be evaluated in relation to the criteria set forth in 36 CFR 60.4. Of particular importance is the requirement that an archeological property eligible for inclusion in the NRHP be capable of yielding information important to our understanding of prehistory or history. In order to identify the types of information that may be considered important for this purpose, Hofman and Brooks (1989:157-180) list a series of research needs and concerns for the Southern Great Plains Region in general. Those which are relevant to the sites in the Fort Sill area included:

1. study of any sites relating to the Paleo-Indian period;
2. paleoecological studies relating to the transition from the Pleistocene to Holocene periods;
3. studies of almost any sites dating to the middle Holocene period from approximately 8,000 to 2,000 years ago;
4. documentation of the dynamic nature of the Holocene environment;
5. studies of the social organization of Holocene hunting and gathering peoples, the structure and flexibility of the bands, group sizes and seasonal variation, and mobility patterns;
6. studies of geomorphic factors, landform changes, and deeply buried archeological sites;

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7. refinement of local cultural chronologies for the Late Prehistoric period, in order to better assess the relationships between the various complexes of this period;
8. better definition of the material assemblages of the Late Prehistoric period;
9. studies of the economic aspects of the Late Prehistoric period, including seasonal variability, economic territories, and change within this period;
10. studies of the interface of distinctive ceramic and chipped stone technologies during the Late Prehistoric period;
11. studies of all sites of the poorly known Protohistoric period;
12. documentation of the daily life, subsistence economy, and interactions of the frontiersman--explorer;
13. examination of documented historic period sites to enable recognition of Native American, Native American slave, and Anglo-American occupations;
14. documentation of settlement patterns and subsistence systems of the Ranching-Farming complex; and
15. reconstruction of early lifeways and socio-economic systems to complement, broaden, and perhaps supplant the historic record.

Thus, the first criterion of significance for any archeological property in the project area is its capability to yield information relevant to one of these research topics. In addition, the following criteria can also be applied to facilitate the evaluation of archeological resources:

1. potential for interpretation of culture history or local sequences;
2. potential for interpretation of intersite or intrasite patterning;
3. potential for interpretation of technology or primitive industries; and/or,
4. existence as a unique example of a site type.

Whether or not specific properties exhibit potential for contributing to our knowledge of prehistory or contain data relevant to any particular research theme is dependent upon a precondition of contextual integrity of the archeological deposits. For example, a prehistoric site located close to East Cache Creek and buried by alluvial deposits has a far greater potential for containing undisturbed deposits than one located on a stable, nonaggrading surface. However, the nature of contextual integrity, as it affects research potential of a property, must also be viewed as being relative to the existing data base for that particular site type or time period.

The survey of the project area was designed to provide a preliminary assessment of:

1. the content (i.e., the range of artifactual and feature information available) of both the known and newly discovered cultural resources in the project area;
2. the integrity of the deposits at these sites (i.e., is the site undisturbed, bioturbated, deflated, etc.);
3. the context of the cultural deposits in relation to both the natural and cultural environment of the appropriate time period; and
4. the density and nature of the cultural resources present within the potential project area as a whole.

The fundamental information derived from the survey was used to evaluate the recorded sites and their potential for increasing our knowledge of past lifeways or contributing to the resolution of regionally pertinent research questions.

RECOMMENDATIONS FOR TREATMENT OF RECORDED SITES

The recommendations presented here for treatment of the sites examined by the survey involve three levels of effort: (1) preserve, (2) archival research and/or test excavation to complete NRHP eligibility determination, and (3) no further work.

The first level of effort involves preservation, recognized as always the most desirable option in managing cultural resources, if it is at all possible. Unfortunately, preservation is not always a viable option. Consequently, final determination of eligibility or mitigative measures must be considered.

The second level of effort involves regional- and project-specific research bearing on the site within a planned program of archival research and/or test excavations. The ultimate goal of such a program would be to determine potential site eligibility for inclusion in the NRHP--a process requiring an understanding of the site's (1) potential for interpretation of culture history or local sequences, (2) potential for interpretation of intersite or intrasite patterning, (3) potential for interpretation of technology or primitive industries, and/or (4) existence as a unique example of a site type.

Finally, the category of "no further work" applies to any sites which, on the basis of the data collected by the present survey, do not appear to have any potential for future research and are hence ineligible for inclusion in the NRHP. This may be as a result of having a data base insufficient to contribute to current research goals in the region, or of being seriously impacted by either natural or human disturbances that have acted to destroy the integrity of the site.

Only one of the 77 sites (see Table 4) recorded during the current survey is currently considered eligible for inclusion in the NRHP. This site, 34Cm-443, represents a swimming pool and associated structural remains at Craterville Park, a regional amusement park that was open from 1922 to 1956. This site has been recommended for preservation.

The eligibility of 37 sites remains unknown at this time. Further testing and evaluation of these sites is recommended. Twenty-five of these sites are historic sites, eight are prehistoric sites, and four contain both historic and prehistoric components.

Documentation of the presence of sufficient cultural remains with contextual integrity is necessary for the final determination of eligibility for prehistoric sites 34Cm-447, 34Cm-458, 34Cm-459, 34Cm-465, 34Cm-475, 34Cm-476, 34Cm-484, and 34Cm-487, and for the prehistoric components of sites 34Cm-454, 34Cm-460, 34Cm-480, and 34Cm-498. Due to the extremely compact nature of the sediments, shovel testing was not adequate at 34Cm-465; mechanical testing, in the form of backhoe trenching and/or power augering, should be conducted in order to better expose the archeological sediments. Site 34Cm-476 is located on the East Branch Wolf Creek floodplain; due to its potential for retaining deeply buried archeological deposits, it too has been recommended for mechanical testing. Rapid testing and final determination of eligibility are needed for Plains Village/Archaic site, 34Cm-447, which is being adversely impacted by intensive military activity on a daily basis.

The remaining properties of unknown eligibility are all either historic sites or multicomponent sites with historic components. Further archival research and test excavations are needed for 18 sites, including one military dump associated with World War I training area Camp Doniphan (34Cm-162); Ketch Ranch (34Cm-358); 10 Euro-American farmsteads (34Cm-446, 34Cm-450, 34Cm-456, 34Cm-468, 34Cm-472, 34Cm-482, 34Cm-488, 34Cm-494, 34Cm-496, and 34Cm-498); four apparent Native American farmsteads

(34Cm-486, 34Cm-489, 34Cm-495, and 34Cm-499) occupied by Comanche settlers from allotment (pre-1901) until government acquisition (1956-1957); and two commercial sites, a blacksmithy (34Cm-493) and a tavern operated by Quanah Parker's son-in-law (34Cm-500). Three sites, including the original location of Quanah Parker's Star House (34Cm-454), Frank Wisely's Rose Mountain Saloon, cabins, and residence (34Cm-480), and an early to mid-twentieth century Native American farmstead (34Cm-492) are recommended for further archival work, testing, and preservation. Three sites, including two Craterville Park cabins (34Cm-444 and 34Cm-497) and a Boy Scout dormitory (34Cm-503) are recommended for further archival work only. One farmstead, 34Cm-464, needs additional testing only; another farmstead, 34Cm-481, has been recommended for preservation.

The remaining 41 sites are considered ineligible for inclusion in the NRHP. These sites lack the contextual integrity necessary for addressing research questions pertinent to the region. The prehistoric sites that are classified as ineligible are either surface manifestations that lack features or a preserved site structure, or have been highly impacted by disturbances. The historic sites that are ineligible may exhibit features, but they either lack sufficient archeological depositions or associations with persons or events that would contribute to their significance.

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APPENDIX A

**DEFINITIONS OF PREHISTORIC ARTIFACT CLASSES,
CODING FORM USED FOR PREHISTORIC
ARTIFACT ANALYSIS,
SUMMARY TABLE FOR PREHISTORIC ARTIFACTS**

DEFINITIONS OF ARTIFACT CLASSES

Bifaces

Projectile Point

A projectile point is a bifacial tool formed by fine secondary retouch with basal modification in the form of notching, stemming, or thinning of the proximal end for purposes of hafting. This category includes basal fragments, but only when the hafting element is present. All other fragments are included within the biface fragment category. Projectile points are separated into dart and arrow point subcategories and are assigned to recognized types when possible.

Aborted Biface

Aborted bifaces are bifacially worked artifacts that appear to have been rejected prior to the completion of the bifacial reduction process. Early and Late stage subcategories are recognized.

Early Aborted Biface - these specimens usually lack symmetry and exhibit sinuous edges formed by the removal of large, thick flakes. Cortex is usually present on at least one surface and areas of step or hinge fracturing may be evident.

Late Aborted Biface - these specimens usually exhibit biconvex symmetry and straight edges. Generally, all cortex will have been removed, but the fine, pressure retouch characteristic of a thinned biface is not present.

Biface Fragment

These specimens are bifacially worked pieces that cannot be placed in a more specific category because of their fragmentary nature.

Thinned Biface

Thinned bifaces are sufficiently whole bifacially worked blanks which exhibit biconvex symmetry, the presence of at least one edge formed by fine secondary retouch, and an absence of cortex except for the proximal end. These artifacts are commonly recognized as knives in the literature.

Unifaces

Unifaces are those tools which exhibit flake scars on one face only. The edges of these blanks have been modified to varying degrees. Those specimens which have been minimally altered are grouped within the marginally modified classification with those which exhibit a steeply chipped edge with patterned flake scars are grouped separately.

Marginally Modified Pieces

Artifacts included in this category are characterized by:

- (1) a single row of flake scars forming an acute angle working edge and
- (2) relatively small flake scars (less than 2mm in width)

Two subcategories are recognized:

- (1) discontinuous retouch or very abrupt retouch of a thin edge which likely reflects use wear and
- (2) purposefully retouched.

The shape of the retouched edge is also recorded. The following edge morphologies are recognized:

- (1) straight to convex
- (2) concave
- (3) concave/convex

Steeply Chipped Unifaces

These artifacts must exhibit the following characteristics:

- (1) a zone of regular, patterned retouch
- (2) two or more rows of overlapping flake scars along the working edge, and
- (3) an edge angle of greater than 50 degrees.

Within this subclass the following are recognized:

Endscraper - scraper retouch is restricted to the distal or proximal end of a blank. A convex working edge is normal. Marginal retouch may appear along the lateral edges of the blank.

Sidescraper - scraper retouch is present on one or both lateral edges of a blank. The working edge may be straight or convex.

Borer and graver - small flakes have been removed along one lateral edge to form a tool for scoring or perforating.

Denticulate and notch - small flakes have been removed along one lateral edge to form a working edge that is serrated (denticulate) or a single concave area (notch).

Within all three subcategories, location of the retouch is recorded for each specimen which is on a recognizable flake blank. The following general locations may occur in multiple combinations of a given flake blank.

- (1) Lateral, obverse - continuous retouch on one edge of the obverse or dorsal face of the flake.
- (2) Lateral, inverse - continuous retouch on one edge of the inverse face of the flake.
- (3) Distal, obverse - continuous retouch on the distal edge of the obverse face of the flake.
- (4) Distal, inverse - continuous retouch on the distal edge of the inverse face of the flake.
- (5) Proximal, obverse - continuous retouch on the proximal or platform end of the obverse face of the flake.

- (6) Proximal, inverse - continuous retouch on the proximal end of the inverse face of the flake.

Lithic Debitage

Flakes

A flake must exhibit a platform and bulb of percussion. If these attributes are missing, the specimen is classified as nondiagnostic shatter. The following attributes are recorded for each flake.

Platform Type - this attribute records the preparation modes for the removal of spalls from a core. Four attribute states are recognized:

- (1) Single faceted - single flake scar forms the platform surface.
- (2) Multi-faceted - two or more flake scars form the platform surface.
- (3) Crushed - most of the platform surface was destroyed on impact; only a remnant, usually step fractured, remains.
- (4) Cortex - striking platform is unmodified; original cortex surface is present.

Flake Size - this attribute records the relative size of the flake. Four categories are recognized:

- (1) Small / < 1 cm
- (2) Medium / 1.0 - 3.0 cm
- (3) Large / > 3 cm
- (4) Micro / < .4 cm

Core

A core is a cobble or mass of lithic material exhibiting scars of the systematic removal of flakes. Five subclasses of cores are recognized:

Tested nodule - a pebble or cobble with one or very few flakes removed. These specimens represent discards from an early material selection stage of the bifacial reduction process.

Multi-directional - a cobble with flakes scars removed from several (3 or more) platform edges.

Bi-directional - a cobble with flake scars removed from two platform edges, either opposite one another or perpendicular to one another.

Discoidal - a cobble which has been bifacially reduced so that a disc shaped core remains.

Fragment and Indeterminate - a broken portion of a core which is too fragmentary for identification.

Ground, Pecked, or Battered Stone

This artifact class includes those specimens shaped or modified by grinding, pecking, or battering. The following subclasses are recognized:

Hammerstone - a nodule of lithic material, usually quartzite, which exhibits battering on one or more edges.

Mano - an ovate shaped nodule of quartzite or sandstone with one or more surfaces smoothed through grinding.

Grinding slab - large, thick slabs, usually of sandstone, which have been ground smooth on one or both surfaces. These surfaces may be flat or basin shaped.

Unworked Cobbles

Included in this artifact class are those nodules or cobbles which are not a natural part of the site context, but have not been altered. These artifacts are usually referred to as manuports.

Burned Rock

Burned rock includes those cobbles or rock fragments which exhibit angular fractures, crazing, pot lid fractures, or discoloration as a result of being heated. These rocks may have been used as boiling stones, griddles, or linings for earth ovens. The raw material may be limestone, sandstone, or quartzite. The term "Fire Cracked Rock" or the acronym "FCR" are also used for describing burned rock.

Three size categories are recognized:

- (1) Small / 1 - 2.5 cm
- (2) Medium / 2.5 - 5 cm
- (3) Large / > 5 cm

Prehistoric Lithics Collected at Fort Sill During the 1992 Survey																				
State Site No.	Field No. (92-xx)	Biface/ Biface frag	Projectile Point	Uniface				Ground Stone Tools			Lithic Debris							Floral Material	Total	
				Modified/ Utilized	Halfed Scraper	Unhalfed Scraper	Perforator/ Graver	Hammer stone	Mano	Ground Stone Fragment	Primary Flake	Secondary Flake	Tertiary Flake	Flake Frag	Angular Frag	Core	Tested Cobble			Faunal Material
34Cm-68	79	2	1	2		1								2	3	1				12
34Cm-75	92												1		1					2
34Cm-276	119						1								2					3
34Cm-284	98		1										1							2
34Cm-303	88														2			1		3
34Cm-306	127	1		2														1		4
34Cm-310	100											2		1	3	18	1	1		26
34Cm-323	70			1																1
34Cm-445	69		2	2								2		1	4	3				14
34Cm-447	73	9	2	6	1	3		2	2	3	1	4	9	61	61	1		4		169
34Cm-448	74	1	1	1		1						1	1		2					8
34Cm-452	78											1	2	1	2	2				8
43Cm-453	80		3	3		1									6	1		2		16
34Cm-454	83	1			2										1	5				9
34Cm-455	84													1	4	1				6
34Cm-457	87											1			1	1	1			4
34Cm-458	89														19	13				32

Prehistoric Lithics Collected at Fort Sill During the 1992 Survey

State Site No.	Field No. (92-xx)	Biface/ Biface frag	Projectile Point	Uniface				Ground Stone Tools				Lithic Debris							Total
				Modified/ Utilized	Hafted Scraper	Unhafted Scraper	Perforator/ Graver	Hammer stone	Mano	Ground Stone Fragment	Primary Flake	Secondary Flake	Tertiary Flake	Flake Frag	Angular Frag	Core	Tested Cobble	Flaked Material	
34Cm-459	90		1																1
34Cm-460	91		1										1	4	4				10
34Cm-461	93													3			2		5
34Cm-462	94	1												6	1				8
34Cm-463	95		1	1							1			3	3				9
34Cm-465	97	1						1				1	2	1		1			7
34Cm-466	99										1		1		9	1			12
34Cm-467	101	2		4							1			9	17				33
34Cm-469	103													2	4				6
34Cm-470	104		1											2					3
34Cm-473	108	1												5	1	1			8
34Cm-474	109	2		2									2	9	27				42
34Cm-475	110	2	2		1						2	2	5	25	18				57
34Cm-476	111													14	4				18
34Cm-477	112										1			3	1	1			6
34Cm-478	113							1			2		1	4	8		1		17
34Cm-479	114	1	2	5	2								3	11	10				34

Prehistoric Lithics Collected at Fort Sill During the 1992 Survey																				
			Uniface					Ground Stone Tools				Lithic Debris								
State Site No.	Field No. (92-xx)	Biface/ Biface frag	Projectile Point	Modified/ Utilized	Hafted Scraper	Unhafted Scraper	Perforator/ Graver	Hammer stone	Mano	Ground Stone Fragment	Primary Flake	Secondary Flake	Tertiary Flake	Flake Frag	Angular Frag	Core	Tested Cobble	Faunal Material	Floral Material	Total
34Cm-480	115			1		1								1						3
34Cm-483	118			1							1		1	3	2					8
34Cm-484	120		1																	1
34Cm-487	126			2		1							3	18	4		2	1		31
34Cm-490	130													1						1
34Cm-498	138													1						1
Total		24	19	33	3	11	1	4	2	3	16	13	34	236	219	7	3	11	1	640

APPENDIX B
SUMMARY TABLE FOR HISTORIC ARTIFACTS

Provenience of Historic Artifacts Recovered during the 1992 Survey of Fort Sill																																								
PROVENIENCE	DOMESTIC										ARCHITECTURAL										PERSONAL ACTIVITIES										UNKN	TOTALS								
	TABLE					STORAGE		FURNISHING			GLASS/NAIL					MORTAR					CLOTH					TOOL						EQUIP					WEAP		COAL	
	Ceramic	Stone	Earthen	Porcelain	Ref J Cor	Glass	Metal	Ceramic	Glass	Metal	Lamp	Other	DOMES	W/OUT	W/IN	Hand	Mach	Fire	FLAS	CER	ELECTR	UNIT	CLOTH	OTH	TOOL	SHARP	TRN	MACH	FARM	WEAP		COAL	Level	Site						
34Cm-441/92-63																																								
Surface																																								
Totals	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6					
34Cm-442/92-64																																								
Surface																																								
Totals	0	2	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7	7					
34Cm-444/92-67																																								
Surface																																								
Totals	0	1	0	0	1	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	14	14					
34Cm-446/92-71																																								
Unit 4, Level 1																																								
Unit 8, Level 1																																								
Totals	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5						
34Cm-449/92-75																																								
Surface																																								
Totals	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4						
34Cm-450/92-76																																								
Surface																																								
Unit 1, Level 1																																								
Unit 2, Level 1																																								
Unit 3, Level 1																																								
Unit 4, Level 1																																								
Unit 7, Level 1																																								
Totals	0	7	0	1	0	1	0	1	0	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	60						
34Cm-451/92-77																																								
Surface																																								
Unit 1, Level 1																																								
Unit 5, Level 1																																								
Unit 6, Level 1																																								
Unit 7, Level 1																																								
Totals	0	3	0	1	1	0	1	1	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7						
34Cm-452/92-78																																								

Provenience of Historic Artifacts Recovered during the 1992 Survey of Fort Sill

PROVENIENCE	DOMESTIC										ARCHITECTURAL										PERSONL ACTIVITIES					UNKN	TOTALS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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	Ceramic					Stone					Ceramic					Glass					Metal						Lamp					Other					Domes					Glass					Nail					Wrt					Cut					Wrt					Fract					Pier					Flas																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

Provenience of Historic Artifacts Recovered during the 1992 Survey of Fort Sill

Provenience of Historic Artifacts Recovered during the 1992 Survey of Fort Sill

PROVENIENCE	DOMESTIC										ARCHITECTURAL										PERSONAL ACTIVITIES										UNKN	TOTALS										
	TABLE			STORAGE			FURNISHING				GLASS			BRICK			MORT			CER			ELECTR			UNID			CLOTH			OTHER			TOOL	EQUIP	TRNS	MAC	FARM	WEAP	COAL	
	Ceramic	Stone	Earthen	Glass	Metal	Porch	Ref	Coe	Lamp	Other	Domes	Wrt	Cut	Wrt	Hand	Mac	Fire	PLAS	MORT	CER	ELECTR	UNID	CLOTH	OTHER																		
Unit1, Level1																																						1				
Unit2, Level1													1																								1	2				
Unit3, Level1													1																								16					
Unit4, Level1																																					1					
Unit5, Level1																																					1					
Unit7, Level1																																					1					
Unit8, Level1													1																								1					
Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	23	23			
34Cm-469/92-103																																										
Surface	1																																					1				
Totals	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1				
34Cm-472/92-107																																										
Surface									4	1																		1										1	7			
Unit3, Level1									3				11																								7	22				
Unit4, Level1								1	4		1						5																				12					
Unit6, Level1											1	1					2																				7					
Unit7, Level1									3		2					1	1																				7					
Unit8, Level1								1								2	3																				6					
Unit9, Level1								1								1																					4					
Unit11, Level1									1								2																				1	2				
Totals	0	1	0	0	1	0	1	0	14	4	4	0	12	3	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	67				
34Cm-480/92-115																																										
Surface	4		1	29		3	23	5			1	5			3											1	2	1									1	79				
Unit2, Level1																																						1				
92-115 Subtotal	0	5	0	1	29	0	3	23	5	0	1	5		3	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	1	80					
34Cm-480/92-122																																										
Surface									3	4																1											10					
Unit9, Level1									1																												1					
Unit10, Level1																																					1	2				
92-122 Subtotal	0	0	0	0	2	0	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	13				

[illegible]

Provenience of Historic Artifacts Recovered during the 1992 Survey of Fort Sill

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		Ceramic	Stone	Earthen	Ref	Occ	Glass	Metal	Stone	Ceramic	Glass	Metal	Lamp	Other	Domes	Wet	Ceil	W/Hand	Brick	Mortar	Ceramic	Elect	Unit	Cloth	Other	Tool	Har	Trns	Equip	Mach	Farm				Wear	Coal	Level	Site																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

Provenience of Historic Artifacts Recovered during the 1992 Survey of Fort Sill																																				
PROVENIENCE	DOMESTIC										ARCHITECTURAL										PERSONAL					ACTIVITIES					UNKN	TOTALS				
	TABLE			STORAGE			FURNISHING		UNID	DOMES	GLASS	NAIL	Wrt	Cut	Wrt	Hand	Mach	Fire	PLAS	MORT	CER	ELCTR	UNID	CLOTH	OTH	PERSONAL			ACTIVITIES			Level	Site			
	Stone	Earthen	Ref/Cor	Glass	Metal	Ceramic	Stone	Lamp																		Other	TOOL	SHARP	TRN	MACH				FARM	WEAP	COAL
Unit 1, Level 1																																			1	
Unit 2, Level 1																																			1	
Unit 3, Level 1																																			4	
Unit 7, Level 1	1																																		4	
Unit 8, Level 1																																			1	
Unit 10, Level 1	3																																		8	
Unit 12, Level 1																																			30	
Unit 12, Level 2																																			8	
Unit 13, Level 1																																			1	
Totals	0	7	0	0	5	0	9	51	0	3	11	0	5	0	4	0	0	1	0	0	0	0	0	0	0	0	2	0	1	3	12	0	0	114	114	
34Cm-494/92-134																																				
Surface																																				
Unit 1, Level 1																																				7
Unit 3, Level 1																																				2
Totals	0	1	0	0	2	0	0	6	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	13	13	
34Cm-495/92-135																																				
Surface																																				
Unit 5, Level 1																																				3
Unit 6, Level 1																																				6
Unit 7, Level 1																																				11
Unit 8, Level 1																																				3
Unit 9, Level 1	1																																			1
Totals	0	1	0	2	3	0	0	14	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	25	25	
34Cm-496/92-136																																				
Surface																																				
Unit 1, Level 1																																				7
Unit 2, Level 1																																				17
Unit 4, Level 1																																				2
Unit 5, Level 1	1																																			4
Unit 6, Level 1																																				3
Totals	0	1	0	2	3	0	0	14	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	25	25	

[illegible]

Provenience of Historic Artifacts Recovered during the 1992 Survey of Fort Sill																																		
PROVENIENCE	DOMESTIC						ARCHITECTURAL						PERSONAL						ACTIVITIES	UNKN	TOTALS													
	TABLE		STORAGE		FURNISHING		GLASS/NAIL		BRICK		MORTAR		CLOTH		TOOL		SHARP	TRN			MACH	FARM	WEAP	COAL	Level	Site								
	Ceramic	Stone	Glass	Metal	Lamp	Other	Wt Cut	Wt Hand	Wt Fine	PLAS	CER	ELCTR	UND	OTH	TOOL	EQUIP																		
L92-219																																		
Surface	1			4			3																									8		
Totals	0	1	0	4	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8		
L92-221																																		
Surface	1			1			4	1																								7		
Totals	0	1	0	1	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7		
L92-246																																		
Surface	4						1																									5		
Totals	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5		
L92-261																																		
Unit 3, Level 2				1																												1		
Totals	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1		
L92-262																																		
Surface							2	5																								7		
Totals	0	0	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7		
L92-264																																		
Surface	7			6	1		26	1												2											1	44		
Totals	0	7	0	6	1	0	26	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	44	44	
Localities Totals	0	13	0	12	1	3	38	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	72	72	
Project Totals	4	177	0	13	154	3	48	467	29	13	49	61	66	2	2	86	0	5	0	105	2	10	1	17	25	13	4	10	11	24	10	8	54	1467

APPENDIX C
DESCRIPTIONS OF 51 LOCALITIES

SURVEY AREA 1

Locality 92-121

Survey of this locality revealed a 5-m-by-5-m roofless, concrete blockhouse, a concrete slab located south of the main structure, and a low cobble wall. No cultural material was observed on the ground surface, and the four shovel tests excavated around the structure were sterile.

Locality 92-230

Examination of the west bank of West Branch Wolf Creek revealed a rubble pile containing concrete reinforced with iron rebar and short lengths of iron railroad track. Located within 10 m south of McKenzie Hill Road, this locality is probably the discarded remains of a concrete bunker or a storm cellar. The closest recorded historic site is located 500 m to the northeast.

SURVEY AREA 2

Locality 92-202

This locality consists of a single chert flake found on the crest of the slope bordering Crater Creek's floodplain, approximately 45 m west of the creek. No additional material was observed on the ground surface or in any of three shovel tests.

Locality 92-203

This locality consists of a single chert flake found on the surface of an unimproved dirt road, approximately 65 m west of Crater Creek. A hearth was associated with this flake; however, based on the preservation of the charcoal, this hearth appears to be of relatively recent origin. No other cultural material was observed on the ground surface or in any of four shovel tests excavated around the flake and hearth.

Locality 92-233

Examination of this locality located a light scatter of historic artifacts within an improved dirt road. Items observed included whiteware fragments, crockery fragments, and metal fragments. No structural remains were associated with this locality and the nearest recorded historic site is located 300 m to the south.

Locality 92-235

This area contains a widely dispersed scatter of historic artifacts, a capped concrete well, a concrete trough, and two military blockhouses. The artifact scatter extends for approximately 1 km along a dirt road, with no identifiable concentration. The blockhouses, well, and trough are located at the western end of the scatter, within an area of 600 m². A thorough investigation of this area failed to locate any indication of house or barn foundations. This area was used during the 1960s for a tent city for the military training that was carried out in this area during the Viet Nam War. The area is currently being utilized as a

training area for noncommissioned officers; the blockhouse was occupied by a squad when this locality was first discovered. While this area may have contained a farmstead and possibly a small mining community at one time, the heavy military utilization of this area has destroyed any significant or even identifiable remains of these earlier structures.

Locality 92-236

Examination of this locality located the remains of a shower facility dating to the Viet Nam War era. A 5-m-by-7-m concrete slab, two 85-gallon Rheem water heaters, and a water pipe are located next to a large stock tank. This facility is situated at the eastern end of the tent city described as locality 92-235. A second shower facility is located to the north of this facility, near the location of another tent city. This second facility is outside of the current project area and was not recorded.

Locality 92-238

This location consists of a 6.5-m-by-14-m roofless blockhouse. This concrete structure has opposing entrances large enough to drive a 2.5 ton truck through. The structure has been painted in an odd yellow, black, and white camouflage pattern and has a number of graffiti slogans written on the walls. No cultural material was associated with this structure.

Locality 92-243

Survey of this locality revealed two pieces of lithic debris on the surface of the Fort Sill boundary firebreak. The flakes were observed on a rise between Crater Creek and a small upland drainage. No other cultural material was located in this area. The closest recorded prehistoric site is 34Cm-75, located 600 m to the northwest.

Locality 92-244

Survey of this locality revealed the remains of a concrete and cobble structure that had been dumped into a small upland tributary of Crater Creek. Associated with this structure was a small amount of historic cultural material, including brick fragments, green bottle glass, whiteware, and waterworn clear glass. No intact cultural remains were observed in this area and shovel testing failed to reveal any buried foundations or cultural material.

Locality 92-246

This locality consisted of one piece of lithic debris and five pieces of historic ceramic fragments. The 1950s aviation map used for this project recorded a structure in this vicinity but no evidence of any architectural features were observed. Unfortunately, the 1950s aviation map has been found to be wildly inaccurate, and cannot be relied on; however, it is possible that the remains observed at locality 92-244 are the remains of a structure originally located in this area. In either case, there are neither significant artifacts nor features currently present at this locality.

Locality 92-247

Survey of this locality revealed a scatter of historic artifacts (nine total) and a fragment of a concrete slab. The 1950s aviation map recorded a structure at this location but no architectural features, intact cultural deposits, or artifacts concentrations were observed. There is little surface indication of cultural activity and shovel testing revealed no buried material or features. Based solely on the ten items observed and the questionable accuracy of the 1950s aviation map, no site designation can be given to this locality.

Locality 92-249

Locality 92-249 consists of a single piece of lithic debris on the surface of an unimproved road. No other cultural material was observed in this heavily eroded area and shovel tests failed to uncover any buried cultural material. The closest recorded prehistoric sites are more than 500 m distant.

Locality 92-257

Survey of this locality revealed a Washita arrow point on the surface of an improved gravel road flanking an unnamed creek. The road has been paved with gravel from the creek bed, making it likely that this point was deposited here during construction or maintenance of this road. Five shovel tests failed to recover any subsurface cultural material.

SURVEY AREA 3

Locality 92-218

This locality consists of one chert flake found in an abandoned cultivated field. No other surface artifacts were observed, and no material was observed in any of four shovel tests.

Locality 92-219

This locality consists of a scatter of milk glass, clear vessel glass, cobalt blue vessel glass, green decorative glass, and whiteware covering approximately 350 m². Located south of Falcon Range Road, the nearest historic sites are 34Cm-494 (92-134) located 300 m to the northwest, and 34Cm-482 (92-117) 450 m to the east. No subsurface material is expected due to the total erosion of surface sediments at this locality's location. This locality appears to be an historic garbage dump.

Locality 92-225

This locality consists of a single chert flake found on an upland knoll 500 m west of Crater Creek. No other cultural material was observed on the ground surface. The closest recorded prehistoric sites are more than 500 m distant.

Locality 92-226

This locality consists of a single chert scraper found in an eroded area bordering an intermittent upland drainage. No other cultural material was observed in the area, and the closest recorded prehistoric site is located more than 500 m away.

Locality 92-239

Examination of this locality revealed a brick and mortar cistern or well. No other structural remains or cultural material were observed in the area, and shovel tests failed to recover any subsurface material or uncover any buried foundations. The closest recorded historic sites are located more than 500 m away.

Locality 92-254

Survey of this locality revealed a single chert flake; scattered in the vicinity are large quantities of angular quartz fragments. While none of these quartz fragments can be positively identified as cultural, it is likely that some of the quartz tools located on nearby recorded sites came from this area. Located within 100 to 200 m of the base of Quanah Mountain, this locality flanks an area containing a large number of low density prehistoric sites.

Locality 92-259

This locality produced a stone-lined cistern located next to a small upland drainage. No cultural material was observed, and shovel testing failed to recover any subsurface cultural material. There are no recorded historic sites within 500 m of this locality, but historic artifacts were observed on the ground surface northwest of this location, in a previously surveyed area. The association of these artifacts with the cistern is unknown. It is not known if an historic structure was located in this previously surveyed area, but it is known that unrecorded historic sites exist within previously surveyed areas.

Locality 92-260

Examination of this locality located a single chert flake on the ground surface. The flake was located on a small rise between two upland drainages, in an area with very little top soil or vegetation. No other material was observed in the area, and shovel tests failed to locate any buried material.

Locality 92-263

Survey of this locality revealed a single Ogallala quartzite flake in a dirt pile formed by the construction of the Fort Sill boundary firebreak, also known as Burma Road. No other cultural material was observed on the ground surface, and shovel testing failed to locate any buried cultural material.

SURVEY AREA 4

Locality 92-106

The upland locality contains one quartzite flake. No other cultural material was observed on the ground surface. Four shovel tests were excavated here, and all were sterile. No known prehistoric site is located within 750 m of this locality.

The area is heavily impacted by military activity with deep ruts crisscrossing the area. Military trash, MRE packaging, empty shotgun shells, and various machinery parts are littered across the area.

Locality 92-205

This locality consists of whiteware, manganese solarized (amethyst) glass, and tin cans (>50) located within a limestone quarry on the eastern end of McKenzie Hill. No structures or other evidence of cultural activity was observed other than the quarry itself. This 15-m² trash scatter probably represents a single dumping episode.

Locality 92-211

This locality consists of a pet burial located south of a small drainage and west of East Branch Wolf Creek. There is a Limestone headstone with the inscription "Katie's Dog Bo" scratched into its surface and a ring of granite cobbles surrounding the grave. Observed in the area is recent trash plus two bricks and bottle glass in the small drainage to the north. No structural remains were observed in this area.

Locality 92-217

This locality consists of a large granite boulder painted with the emblem and slogan of a military support unit. This boulder is located west of the cantonment and is surrounded by a chain-link fence.

Locality 92-228

Survey of this locality revealed a single quartzite flake and a tested quartzite cobble on the slope of a moderately disturbed rise. No other cultural material was observed in this area. Prehistoric sites 34Cm-250 and 34Cm-298 and locality 92-229 are all within 500 m of this locality.

Locality 92-229

This locality produced a single quartzite flake, recovered from the slope of a heavily disturbed rise. No other cultural material was observed in this area. Prehistoric site 34Cm-298 and locality 92-229 are located within 500 m of this locality.

Locality 92-255

Survey of this locality revealed a single piece of lithic debris, a manganese solarized glass fragment, and crockery fragments, all found on the slope flanking a small upland drainage. The locality is located on the north side of the south boundary road, and is more than 500 m from any recorded prehistoric or historic site.

SURVEY AREA 5

Locality 92-216

This locality consists of two Ogallala quartzite flakes found on the surface of an unimproved dirt road. No other cultural material was observed in this area.

Locality 92-251

Survey of this locality revealed the remains of a 2-m² cinder block structure. The intact portion of the structure is three courses high with rubble from the remainder of the structure contained within. No other cultural material is associated with this structure.

SURVEY AREA 6

Locality 92-68

Survey of this locality revealed eight earthen gun emplacements and a series of earthen berms. Manganese solarized glass, whiteware, crockery, aqua glass, and metal fragments were observed on the ground surface. There is no evidence of architectural features, and in any case the remnants of any historic structures in this area would have been destroyed by the construction of the gun emplacements.

Locality 92-200

This locality consists of a single flake of Ogallala quartzite found in the Fort Sill boundary firebreak. Approximately 3 m from the flake is a dark stain that may represent the remains of a hearth. While no other cultural material was observed on the ground surface or in any of three shovel tests, it is possible that intact cultural deposits may be present across the boundary fence in the Wichita Mountains Wildlife Refuge.

Locality 92-214

This locality consists of a single chert flake and three pieces of manganese solarized glass in a heavily eroded unimproved road. No other cultural material was observed in the immediate vicinity, but prehistoric site 34Cm-469 (92-103) is located 120 m upslope from this location.

SURVEY AREA 8

Locality 92-206

This locality consists of a 2.5-m-by-3.5-m concrete slab located approximately 75 m north of Bald Ridge Road. The green bottle glass scattered on and around this slab is of recent origin. This slab is located within an area that has been a part of Fort Sill since before historic Euro-American settlement of this area, and is of unknown military function.

Locality 92-207

This locality consists of the remains of five "U" shaped blockhouses. Other than these five structures, no cultural material was observed at this location.

SURVEY AREA 10

Locality 92-208

This locality consists of a partially buried concrete slab north of Bald Ridge Road. No other cultural material was observed. This slab is located within an area that has been a part of Fort Sill since before historic Euro-American settlement of this area, and is of unknown military function.

Locality 92-209

This locality consists of the roofless remnants of five concrete blockhouses located on the north side of Bald Ridge Road. No cultural material was associated with these structures.

Locality 92-210a

This locality consists of a large, earth-covered concrete bunker. Two stairs lead to the top of the bunker from its eastern and western ends, and two stairs on the north lead down into the bunker. A viewing port approximately 15 cm wide extends the length of the bunker's north face. The only cultural material associated with the bunker is a rolled-up metal runway located on the ground surface, approximately 35 m south of the bunker.

Locality 92-210b

Survey of this locality revealed the remains of five concrete blockhouses. The walls from two blockhouses are still standing, but the other three have collapsed. No cultural material was observed on the ground surface and none was recovered during shovel testing. Located 350 m southwest of locality 92-110 and 40 m west of the access road to locality 92-110, the condition of these blockhouses indicates that they predate that structure but are contemporary with other blockhouses observed in this area.

SURVEY AREA 11

Locality 92-221

This locality consists of five separate concentrations of glass, ceramic, and crockery fragments in a heavily disturbed area on the north side of South Boundary Road. Diagnostic artifacts point to a 1930s date for this material. The closest historic sites are 34Cm-485 (92-123), located 600 m to the northeast, and 34Cm-490, located 550 m to the northwest.

Locality 92-222

This locality consists of a dispersed scatter of stoneware, manganese solarized glass, crockery, and window glass fragments, plus a small amount concrete rubble and recent trash. The scatter is located on the western slope and base of an upland ridge, and is not associated with any structural remains. No cultural material was found in any of the shovel tests excavated at this location. The closest historic sites recorded in this area are all more than 500 m distant.

Locality 92-223

This locality consists of a single chert flake found in a firebreak. No other cultural material was observed on the ground surface and no material was recovered during shovel testing. No recorded prehistoric site is located within 500 m of this locality.

Locality 92-224

This locality consists of a single, utilized chert flake found in a firebreak. No other cultural material was observed on the ground surface and no material was recovered during shovel testing. This locality is approximately 100 m west of site 34Cm-487 (92-126).

Locality 92-227

This locality consists of a concrete cattle trough and the remains of a metal windmill. No other cultural material was observed in association with these features. The closest recorded historic site is more than 500 m distant, however, it seems likely that an historic farmstead existed closer than 500 m in the area currently utilized as the Quanah Range Impact Area.

Locality 92-250

Survey of this locality revealed both a small scatter of historic material and one piece of lithic debris. Historic material included decorative glass, whiteware, window glass, and clear bottle glass. No architectural features were observed. The closest recorded historic site is 34Cm-499 (92-140), located 300 m to the east.

Locality 92-261

Examination of this locality located a large scatter of tin cans, one gallon kerosene cans, mason jar fragments, canning lid fragments, a wash tub, car seat springs, and clear glass fragments. Shovel testing recovered one piece of green tint bottle glass. No structural remains were observed, and archival research did not indicate that any structure had been located at this location. The closest historic site is more than 500 m distant.

Locality 92-262

Examination of this locality located a scatter of historic trash including whiteware, manganese solarized glass, crockery, Prince Albert tobacco cans, clear vessel glass, and stoneware. One glass vessel fragment had the date of August 31, 1915 embossed on the bottom. There is little to no top soil remaining on the upland ridge where this locality is located. No structures were observed at this location and archival research indicated that none should be expected. This site appears to represent an historic dump.

Locality 92-265

Survey of this locality revealed a round concrete and cobble object (flagpole base?) on the ground surface, with wooden bleachers located 30 m to the south. No other cultural material was observed at this location and shovel testing conducted in this area failed to locate any subsurface material.

CANTONMENT AREA

Locality 92-139

The locality consists of two foundations. One is complete and measures 7 m by 2 m; the second foundation has been partially destroyed, and the remaining portion measures 3 m by 2 m. No cultural material was observed on the ground surface, and the four shovel tests excavated were sterile. This locality is within the cantonment of Fort Sill, an area never settled nor occupied by Euro-American settlers, so it must date to an unknown military occupation.

APPENDIX D
PROFILE DESCRIPTIONS

PROFILE DESCRIPTIONS

All soil colors were derived from a Munsell Soil Color Chart. The stratigraphic units appearing in these descriptions are identical to those used in the text (Chapter 5 and in Table 2 and 3).

Depth (cm bs)	Stratigraphic Unit	Soil Horizon	Description
<i>Profile 1: east bank of West Cache Creek, south of ford</i>			
0-70	F ₂	A	Dark grayish brown (10YR 4/2) d (dry), very dark brown (10YR 2/2) w (wet) clayey medium sand with occasional granitic pebbles up to 5 cm in diameter; upper 48 cm exhibits soil development (Soil 2); block structure; roots common throughout; lower boundary transitional over 5 cm; maximum observed thickness, 100 cm.
70-80	F ₁	C1	Silty, sandy gravel; gravel consists of reddish yellow (5YR 7/6) d granitic cobbles 3 to 20 cm in diameter; silty sand matrix is dark grayish brown (10YR 2/2) w; roots common throughout; lower boundary abrupt and unconformable; maximum observed thickness, 20 cm.
80-105	E	C2	Strong brown (10YR 4/6) w coarse arkosic sand; roots throughout; lower boundary abrupt and unconformable; maximum observed thickness 35 cm.
105-170	D ₂	2Ab	Dark grayish brown (10YR 4/2) d, very dark grayish brown (10YR 3/2) w silty sand; paleosol (Soil 1) developed throughout; angular blocky structure; roots throughout; lower boundary gradual; maximum observed thickness, 60 cm.
170-185	D ₂	2C	Yellowish red (10YR 4/6) w fine, sandy gravel; gravel is angular and very fine, with no clasts larger than 3 mm in diameter; sand is coarse and arkosic; lower boundary gradual to abrupt; maximum observed thickness, 60 cm.
185-220	C	3C	Brown (7.5 YR 4/3) medium to coarse sand; massive; no roots present; lower boundary abrupt; maximum observed thickness, 100 cm. Part of this unit is overlain by Unit G, a colluvial silty sand layer derived from overlying units.
220-230	B	4C	Black (10YR 2/1) w, very dark grayish brown (10YR 3/2) d silty clay; massive; lower boundary abrupt and unconformable; maximum observed thickness, 20 cm.

Depth (cmbs)	Stratigraphic Unit	Soil Horizon	Description
230-255	A	5Ck	Sandy gravel; gravel consists of light gray (10YR 7/2) d; granitic cobbles up to 20 cm in diameter, apparently coated with calcium carbonate; sand is medium dark grayish brown (10YR 4/2) w; unit directly and unconformably overlies weathered Permian bedrock; maximum observed thickness, 35 cm.
255-265	Bedrock	R	light brownish gray (2.5Y 6/2) w, light gray (2.5YR 7/2) d coarse sandstone; apparently Permian in age; maximum observed thickness, 10 cm.

Profile 2: west bank of West Cache Creek, north of ford

0-50	F ₂	A	Dark grayish brown (10YR 4/2) d, black (10YR 2/1) w; clayey medium sand with occasional granitic pebbles from 2-20 cm in diameter, concentrated in the lower 25 cm of unit; upper 40 cm exhibits soil development (Soil 2); angular blocky structure; roots common throughout; lower boundary transitional over 5 cm; maximum observed thickness, 56 cm.
50-75	F ₁	C	Silty, sandy gravel; gravel consist of reddish yellow (5YR 7/6) d granitic cobbles 2-20 cm in diameter; silty sand matrix is dark grayish brown (10YR 4/2) d, very dark brown (10YR 2/2) w; roots common throughout; lower boundary abrupt and unconformable; maximum observed thickness, 30 cm.
75-350	A	2C	Yellowish red (5YR 4/6) d poorly sorted sandy gravel; sand is arkosic; gravel consists of granitic clasts 2 mm-30 cm in diameter; lower boundary not observed; maximum observed thickness, 300 cm.

Profile 3: south bank of Post Oak Creek, north of ford

0-170	A ₂	A	Dark reddish brown (5YR 3/4) w, brown (7.5YR 5/4) d silty medium sand; roots common throughout; occasional small granitic pebbles <3 cm in diameter in lower portion of unit; angular blocky structure; upper portion of profile (125 cm) exhibits soil development (Soil 1); lower boundary is gradual; maximum observed thickness, 200 cm.
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Depth (cmbs)	Stratigraphic Unit	Soil Horizon	Description
170-195	A ₁	C	Poorly sorted granitic and sandstone cobbles in a silty sand matrix; granitic cobbles are reddish yellow (7.5YR 7/6), sandstone cobbles are pinkish gray (5YR 6/2), silty sand in the same color as Unit A ₂ ; cobbles up to 10 cm in diameter, size decreasing as unit grades upward; occasional roots present; maximum observed thickness, 50 cm.
195-245	Bedrock	R	Highly weathered Permian bedrock consisting of interbedded sandstones and claystones; sandstones vary in color from olive (5Y 5/3) to pinkish gray (5YR 6/2), claystones are dark red (2.5YR 3/6); maximum observed thickness, 80 cm.

Profiles 4: north bank of Post Oak Creek, north of ford

0-30	C	A	Dark brown (10YR 5/3) d, dark brown (7.5YR 3/3) w fine silty sand; massive to angular blocky structure; no soil development; roots throughout; lower boundary is abrupt to gradual; maximum observed thickness, 50 cm.
30-80	B	2Ab	Dark brown (10YR 5/3) d, dark brown (7.5YR 4/4) w fine silty sand; angular blocky structure; a paleosol, Soil 2, is developed discontinuously on upper portion of unit; roots throughout; lower boundary is abrupt and unconformable; maximum observed thickness, 50 cm.
80-130	A ₂	3Ab	Yellowish brown (10YR 5/4) d, dark brown (10YR 3/3) w silty medium sand; occasional roots; angular blocky to columnar structure; upper portion of soil profile exhibits soil development (Soil 1); lower boundary is abrupt and unconformable; maximum observed thickness, 80 cm.
130-170	Bedrock	R	Highly weathered dark brown (7.5YR 4/4) w to gray (10YR 4/1) w silty clay; occasional black (10YR 2/1) w, organic rich lamellae; maximum observed thickness, 40 cm.